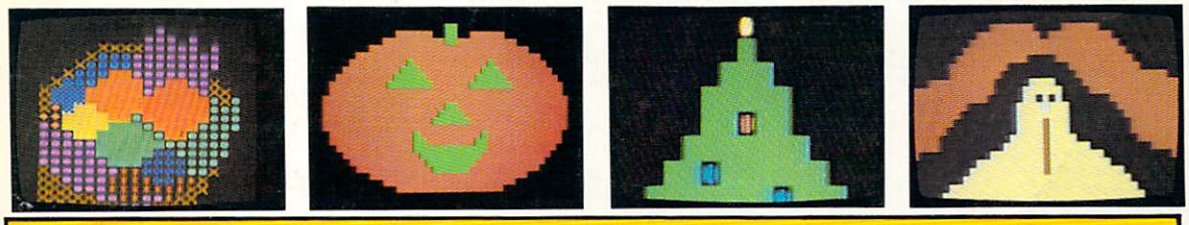
THE BEST OF FAMILY COMPUTING PROGRAMS



BY JOEY LATIMER
AND THE FAMILY COMPUTING TECHNICAL STAFF

THE BEST OF THE BEST

Judging from our mail, month after month, FAMILY COMPUTING's programs are just about our readers' favorite part of the magazine. We're still amazed by the response.

What makes FAMILY COMPUTING programs so special? Probably the most important factor is that they're designed just for our readers. Since we reach a specific audience—families, of course—and don't have to try to be something for everyone, we usually start planning our programs by thinking about what might be going on in most homes in a given month.

Holiday programs are the most popular of all. Many readers write in to say they're like an extra present or holiday treat that provides special spark to the regular festivities. Because of this response, most of the programs in this book are written on holiday or seasonal themes. We think they'll add both to the occasion and to the sense of accomplishment and pleasure that come from making good use of your computer.

Claudia Cohl

CLAUDIA COHL
EDITOR-IN-CHIEF

CONTENTS

The Best of FAMILY COMPUTING *Programs* contains translations for the ADAM, Apple, Atari, Commodore 64, IBM PC/PC*jr*, TI-99/4A, Timex Sinclair 1000/1500, TRS-80 Color Computer/Model III, and VIC-20 computers.

INTRODUCTION

TIPS TO THE TYPIST

Even the most experienced programmers make the most basic errors every once in a while. To help you avoid frustrating mistakes, here are some simple programming reminders.

1.

When you type program lines into your computer, be sure to copy them exactly as written. Numbers, punctuation marks, and spaces are important.

2.

Press RETURN or ENTER after every completed program line.

3.

Before you run the program, save it. That way you avoid crashing the program if you make a typing error.

4.

Run the program when you finish typing it in by typing RUN and pressing the RETURN or ENTER key. If the computer gives you an error message, don't panic. Mistakes can be fixed. List the program by typing the word LIST and pressing the RETURN or ENTER key, and double-check each line. If there is data, check to make sure you haven't typed any extra commas. Make sure you've typed zeros where zeros are needed and not the letter "O." A foolproof way to correct a mistake is to type in the entire line again (including its line number) and press RETURN or ENTER. When you LIST the program again, you'll find the new line in place of the old.

5.

If you need more help, read the programming guide you received with your computer. It should cover most of your questions.

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RENEGADE ROBOT

The top-secret building where you work is guarded by a robot. One day you arrive at work and find the robot missing. Puzzled, you enter the building and immediately sense that something has gone wrong. Strange noises are coming from a distant corridor. You investigate and discover that it's the sound of the robot, twirling around in circles and crashing into walls. "Its wires must have snapped!" you think to yourself. "It's gone completely berserk!"

The instant the robot senses your presence, it starts coming after you, red eyes flashing madly. Your only hope is to reach the center of the building and turn off the power switch that controls the robot before it catches you. It won't be easy: The robot is smart and knows not only the floorplan by heart, but also why you're heading toward the building's center. You'd better get started; time is running out.

You can thwart the *Renegade Robot* with either your joystick (plug it into port No. 1) or your keyboard. Press the following keys to move: "U" (up left); "I" (up center); "O" (up right); "J" (left); "L" (right); "M" (down left); comma (down center); and period (down right). Your remaining points are recorded on the screen; the highest score will be displayed.

ADAM/*Renegade Robot*

```
10 GR
20 READ s,hr,hc,f
30 COLOR= 3
40 PLOT 19,17
50 PLOT 19,18
60 PLOT 20,17
70 PLOT 20,18
80 COLOR= 7
90 FOR x = 1 TO 24
100 READ a,b,c
110 FOR y = a TO b
120 IF x <= 12 THEN PLOT c,y:GOTO 140
130 PLOT y,c
140 NEXT y
150 NEXT x
160 h1 = INT(RND(1)*22)
170 h2 = INT(RND(1)*8)+32*(RND(1) > 0.5)
180 VTAB 22
190 HTAB 15
200 PRINT s;" "
210 s = s-1
220 j = PDL(5)
230 ro = h1+(j = 4 OR j = 6 OR j = 12)-(j = 1 OR j = 3
 OR j = 9)
240 co = h2+(j = 2 OR j = 3 OR j = 6)-(j = 8 OR j = 9
OR j = 12)
250 ro = ro-(ro > 39)+(ro < 0)
260 co = co-(co > 39)+(co < 0)
270 IF SCRN(co,ro) = 7 THEN ro = h1:co = h2:GOTO 350
280 COLOR= 0
290 PLOT h2,h1
300 COLOR= 13
```

```
310 PLOT co,ro
320 h1 = ro
330 h2 = co
340 IF (ro = 17 OR ro = 18) AND (co = 19 OR co = 20)
THEN 530
350 ra = hr+(ro > hr)-(ro < hr)
360 ca = hc+(co > hc)-(co < hc)
370 ra = ra-(ra > 39)+(ra < 0)
380 ca = ca-(ca > 39)+(ca < 0)
390 IF SCRN(ca,ra) <> 3 AND SCRN(ca,ra) <> 7 THEN 450
400 d = 2*INT(RND(1)*2)-1
410 IF f THEN ra = hr+d:ca = hc:GOTO 430
420 ca = hc+d:ra = hr
430 f = NOT f
440 GOTO 370
450 COLOR= 0
460 PLOT hc,hr
470 COLOR= 11
480 PLOT ca,ra
490 hc = ca
500 hr = ra
510 IF ca = co AND ra = ro THEN 610
520 GOTO 180
530 TEXT
540 IF s > hs THEN hs = s
550 FOR t = 1 to 50
560 PRINT CHR$(7);"You did it! ";
570 NEXT t
580 HOME
590 PRINT "Your score is ";s;"."
600 GOTO 630
610 TEXT
620 PRINT CHR$(7);"Sorry, you were caught!"
630 PRINT "The high score is ";hs;"."
640 PRINT "Press <RETURN> to play again.";
650 GET k$
660 IF k$ <> CHR$(13) THEN 650
670 RESTORE
680 GOTO 10
1000 DATA 1000,25,20,0
2000 DATA 6,18,8,20,33,8,12,13,12,15,24,12,26
2010 DATA 27,12,16,22,16,16,22,23,12,13,27,15
2020 DATA 24,27,26,27,27,6,18,31,20,33,31,10,19
2030 DATA 6,12,29,6,12,14,12,16,23,12,25,27,12
2040 DATA 16,23,16,18,21,22,12,14,27,16,23,27
2050 DATA 25,27,27,10,19,33,21,29,33
```

Apple/*Renegade Robot*

```
10 TEXT
20 HOME
30 PRINT "DO YOU WANT TO USE THE <K>EYBOARD"
40 PRINT "OR THE <J>OYSTICK?";
50 GET K$
60 IF K$ <> "K" AND K$ <> "J" THEN 50
70 KB = (K$ = "J")
80 HOME
90 GR
```

```
100 READ S,HR,HC,F
110 COLOR= 3
120 PLOT 19,17
130 PLOT 19,18
140 PLOT 20,17
150 PLOT 20,18
160 COLOR= 7
170 FOR X = 1 TO 24
180 READ A,B,C
190 FOR Y = A TO B
200 IF X <= 12 THEN PLOT C,Y:GOTO 220
210 PLOT Y,C
220 NEXT Y
230 NEXT X
240 H1 = INT(RND(1)*22)
250 H2 = INT(RND(1)*8)+32*(RND(1) > 0.5)
260 VTAB 22
270 HTAB 18
280 PRINT S;" "
290 S = S-1
300 IF KB = 0 THEN 340
310 RO = H1+(PDL(1) > 192)-(PDL(1) < 64)
320 CO = H2+(PDL(0) > 192)-(PDL(0) < 64)
330 GOTO 380
340 J = PEEK(-16384)-128
350 POKE -16368,0
360 RO = H1+(J = 44 OR J = 46 OR J = 77)-(J = 73 OR J
= 79 OR J = 85)
370 CO = H2+(J = 46 OR J = 76 OR J = 79)-(J = 74 OR J
= 77 OR J = 85)
380 RO = RO-(RO > 39)+(RO < 0)
390 CO = CO-(CO > 39)+(CO < 0)
400 IF SCRN(CO,RO) = 7 THEN RO = H1:CO = H2:GOTO 480
410 COLOR= 0
420 PLOT H2,H1
430 COLOR= 13
440 PLOT CO,RO
450 H1 = RO
460 H2 = CO
470 IF (RO = 17 OR RO = 18) AND (CO = 19 OR CO = 20) T
HEN 660
480 RA = HR+(RO > HR)-(RO < HR)
490 CA = HC+(CO > HC)-(CO < HC)
500 CA = CA-(CA > 39)+(CA < 0)
510 RA = RA-(RA > 39)+(RA < 0)
520 IF SCRN(CA,RA) <> 3 AND SCRN(CA,RA) <> 7 THEN 580
530 D = 2*INT(RND(1)*2)-1
540 IF F THEN RA = HR+D:CA = HC:GOTO 560
550 CA = HC+D:RA = HR
560 F = NOT F
570 GOTO 500
580 COLOR= 0
590 PLOT HC,HR
600 COLOR= 11
610 PLOT CA,RA
620 HC = CA
630 HR = RA
640 IF CA = CO AND RA = RO THEN 760
```

```
650 GOTO 260
660 TEXT
670 HOME
680 IF S > HS THEN HS = S
690 FOR T = 1 TO 150
700 PRINT "YOU DID IT! ";
710 A = PEEK(-16336)
720 NEXT T
730 HOME
740 PRINT "YOUR SCORE IS ";S;"."
750 GOTO 790
760 TEXT
770 HOME
780 PRINT CHR$(7);"SORRY, YOU WERE CAUGHT!"
790 PRINT "THE HIGH SCORE IS ";HS;"."
800 PRINT "PRESS <RETURN> TO PLAY AGAIN.";
810 GET K$
820 IF K$ <> CHR$(13) THEN 810
830 RESTORE
840 GOTO 80
1000 DATA 1000,30,19,0
2000 DATA 6,18,8,20,33,8,12,13,12,15,24,12,26,27
2010 DATA 12,16,22,16,16,22,23,12,13,27,15,24,27
2020 DATA 26,27,27,6,18,31,20,33,31,10,19,6,12,29
2030 DATA 6,12,14,12,16,23,12,25,27,12,16,23,16,18
2040 DATA 21,22,12,14,27,16,23,27,25,27,27,10,19
2050 DATA 33,21,29,33
```

Atari/*Renegade Robot*

```
10 OPEN #1,4,0,"K:"
20 GRAPHICS 0
30 PRINT CHR$(125);"DO YOU WANT TO USE THE <K>EYBOARD"
40 PRINT "OR THE <J>OYSTICK?"
50 GET #1,KB
60 IF KB<>ASC("J") AND KB<>ASC("K") THEN 50
70 KB=(KB=ASC("J"))
80 GRAPHICS 3
90 READ S,HR,HC,F
100 POKE 752,1
110 COLOR 2
120 PLOT 19,9
130 PLOT 20,9
140 COLOR 3
150 FOR X=1 TO 24
160 READ A,B,C
170 FOR Y=A TO B
180 IF X<=12 THEN PLOT C,Y:GOTO 200
190 PLOT Y,C
200 NEXT Y
210 NEXT X
220 H1=INT(RND(0)*22)
230 H2=INT(RND(0)*7)+33*(RND(0)>0.5)
240 POKE 656,1
250 POKE 657,19
260 PRINT S;" ";
270 S=S-1
280 IF KB=0 THEN 330
```

```
290 J=STICK(0)
300 RO=H1+(J=5 OR J=9 OR J=13)-(J=6 OR J=10 OR J=14)
310 CO=H2+(J>=5 AND J<=7)-(J>=9 AND J<=11)
320 GOTO 370
330 J=PEEK(764)
340 POKE 764,255
350 RO=H1+(J=32 OR J=34 OR J=37)-(J=8 OR J=11 OR J=13)
360 CO=H2+(J=0 OR J=8 OR J=34)-(J=1 OR J=11 OR J=37)
370 RO=RO-(RO>19)+(RO<0)
380 CO=CO-(CO>39)+(CO<0)
390 LOCATE CO,RO,SC
400 IF SC=3 THEN RO=H1:CO=H2:GOTO 480
410 COLOR 4
420 PLOT H2,H1
430 COLOR 2
440 PLOT CO,RO
450 H1=RO
460 H2=CO
470 IF RO=9 AND (CO=19 OR CO=20) THEN 670
480 RA=HR+(RO>HR)-(RO<HR)
490 CA=HC+(CO>HC)-(CO<HC)
500 RA=RA-(RA>19)+(RA<0)
510 CA=CA-(CA>39)+(CA<0)
520 LOCATE CA,RA,CH
530 IF CH<>3 AND (RA<>9 OR CA<>19 AND CA<>20) THEN 590
540 D=2*INT(RND(0)*2)-1
550 IF F THEN RA=HR+D:CA=HC:GOTO 570
560 CA=HC+D:RA=HR
570 F= NOT F
580 GOTO 500
590 COLOR 4
600 PLOT HC,HR
610 COLOR 1
620 PLOT CA,RA
630 HR=RA
640 HC=CA
650 IF CA=CO AND RA=RO THEN 750
660 GOTO 240
670 GRAPHICS 0
680 IF S>HS THEN HS=S
690 FOR T=1 TO 75
700 PRINT "YOU DID IT! ";
710 SOUND 0,T,10,8
720 NEXT T
730 PRINT CHR$(125);"YOUR SCORE IS ";S;"."
740 GOTO 780
750 GRAPHICS 0
760 SOUND 0,123,10,10
770 PRINT "SORRY, YOU WERE CAUGHT!"
780 PRINT "THE HIGH SCORE IS ";HS;"."
790 PRINT "PRESS <RETURN> TO PLAY AGAIN."
800 SOUND 0,0,0,0
810 GET #1,A
820 IF A<>155 THEN 810
830 RESTORE
840 GOTO 80
1000 DATA 1000,13,19,0
2000 DATA 1,8,7,10,18,7,5,6,11,8,11,11,13,14,11,8,11
```

```
2010 DATA 16,8,11,23,5,6,28,8,11,28,13,14,28,1,8,32
2020 DATA 10,18,32,9,19,1,21,30,1,12,13,5,15,24,5
2030 DATA 26,27,5,17,22,8,18,21,11,12,13,14,15,24,14
2040 DATA 26,27,14,9,19,18,21,30,18
```

Commodore 64/*Renegade Robot*

```
10 FOR X=54272 TO 54296
20 POKE X,0
30 R$=R$+CHR$(17)
40 NEXT X
50 PRINT CHR$(147);CHR$(5);"DO YOU WANT TO USE THE <K>EYBOARD"
60 PRINT "OR THE <J>OYSTICK?";
70 GET KB$
80 IF KB$<>"K" AND KB$<>"J" THEN 70
90 KB=(KB$="J")
100 PRINT CHR$(147);
110 READ SC,CL,S,HR,HC,F
120 POKE 54296,15
130 POKE 54278,241
140 POKE 53280,13
150 POKE 53281,11
160 POKE 1484,102
170 POKE 55756,7
180 FOR X=1 TO 24
190 READ A,B,C
200 FOR Y=A TO B
210 IF X<=12 THEN POKE SC+C+40*Y,160:POKE CL+C+40*Y,14:GOTO 230
220 POKE SC+Y+40*C,160:POKE CL+Y+40*C,14
230 NEXT Y
240 NEXT X
250 H1=INT(RND(1)*22)
260 H2=INT(RND(1)*7)-34*(RND(1)>.5)
270 PRINT CHR$(19);LEFT$(R$,23);TAB(18);STR$(S);" ";
280 S=S-1
290 IF KB=0 THEN 340
300 J=15-(PEEK(56321) AND 15)
310 RO=H1-(J=2 OR J=6 OR J=10)+(J=1 OR J=5 OR J=9)
320 CO=H2-(J>=8 AND J<=10)+(J>=4 AND J<=6)
330 GOTO 390
340 GET J$
350 IF J$="" THEN J=0:GOTO 370
360 J=ASC(J$)
370 RO=H1-(J=44 OR J=46 OR J=77)+(J=73 OR J=79 OR J=85)
380 CO=H2-(J=46 OR J=76 OR J=79)+(J=74 OR J=77 OR J=85)
390 RO=RO+(RO>22)-(RO<0)
400 CO=CO+(CO>39)-(CO<0)
410 IF PEEK(SC+CO+40*RO)=160 THEN RO=H1:CO=H2:GOTO 490
420 POKE SC+H2+40*H1,42
430 POKE CL+H2+40*H1,11
440 POKE SC+CO+40*RO,42
450 POKE CL+CO+40*RO,7
460 H1=RO
470 H2=CO
480 IF CO=20 AND RO=11 THEN 680
490 RA=HR-(RO>HR)+(RO<HR)
500 CA=HC-(CO>HC)+(CO<HC)
510 RA=RA+(RA>22)-(RA<0)
```

```
520 CA=CA+(CA>39)-(CA<0)
530 CH=PEEK(SC+CA+40*RA)
540 IF CH<>160 AND CH<>102 THEN 600
550 D=2*INT(RND(1)*2)-1
560 IF F THEN RA=HR+D:CA=HC:GOTO 580
570 CA=HC+D:RA=HR
580 F=NOT F
590 GOTO 510
600 POKE SC+HC+40*HR,87
610 POKE CL+HC+40*HR,11
620 POKE SC+CA+40*RA,87
630 POKE CL+CA+40*RA,8
640 HR=RA
650 HC=CA
660 IF CA=CO AND RA=RO THEN 780
670 GOTO 270
680 PRINT CHR$(147);
690 IF S>HS THEN HS=S
700 POKE 54276,33
710 FOR T=100 TO 1 STEP -1
720 PRINT "YOU DID IT! ";
730 POKE 54273,T
740 POKE 54272,T+50
750 NEXT T
760 PRINT CHR$(147);"YOUR SCORE IS";S;CHR$(157);"."
770 GOTO 830
780 PRINT CHR$(147);
790 POKE 54272,135
800 POKE 54273,17
810 POKE 54276,33
820 PRINT "SORRY, YOU WERE CAUGHT!"
830 PRINT "THE HIGH SCORE IS";HS;CHR$(157);"."
840 PRINT "PRESS <RETURN> TO PLAY AGAIN.";
850 POKE 54276,0
860 GET K$
870 IF K$<>CHR$(13) THEN 860
880 RESTORE
890 GOTO 100
1000 DATA 1024,55296,1000,12,15,0
2000 DATA 3,10,7,12,20,7,7,8,11,10,13,11,15,16,11
2010 DATA 10,13,17,10,13,23,7,8,28,10,13,28,15,16,28
2020 DATA 3,10,32,12,20,32,9,19,3,21,30,3,11,14
2030 DATA 7,16,24,7,26,28,7,17,23,10,19,21,13,11
2040 DATA 14,16,16,24,16,26,28,16,9,19,20,21,30,20
```

IBM PC w/Color Graphics Adapter & IBM PC*jr*/*Renegade Robot*

```
10 DEF SEG=0
20 KEY OFF
30 WIDTH 40
40 SCREEN 0,1
50 LOCATE ,,0
60 CLS
70 COLOR 7
80 RANDOMIZE
90 PRINT "DO YOU WANT TO USE THE <K>EYBOARD"
100 PRINT "OR THE <J>OYSTICK?"
110 KB$=INKEY$
```

```
120 IF KB$<>"J" AND KB$<>"K" THEN 110 ELSE KB=(KB$="J")
130 CLS
140 READ S,HR,HC,F
150 COLOR 3
160 LOCATE 10,19:PRINT CHR$(219);CHR$(219)
170 COLOR 2
180 FOR X=1 TO 24
190 READ A,B,C
200 FOR Y=A TO B
210 IF X<=12 THEN LOCATE Y,C ELSE LOCATE C,Y
220 PRINT CHR$(219);
230 NEXT Y,X
240 H1=INT(RND*22)+1
250 H2=INT(RND*6)+1-32*(RND>.5)
260 COLOR 2
270 LOCATE 23,18
280 PRINT S;" ";
290 S=S-1
300 IF KB=0 THEN 360
310 J0=STICK(0)
320 J1=STICK(1)
330 R0=H1+(J1<35)-(J1>50)
340 C0=H2+(J0<50)-(J0>65)
350 GOTO 420
360 J$=INKEY$
370 IF J$="" THEN J=0:GOTO 400
380 J=ASC(J$)
390 POKE 1050,PEEK(1052)
400 R0=H1-(J=44 OR J=46 OR J=77)+(J=73 OR J=79 OR J=85)
410 C0=H2-(J=46 OR J=76 OR J=79)+(J=74 OR J=77 OR J=85)
420 R0=R0+(R0>22)-(R0<1)
430 C0=C0+(C0>40)-(C0<1)
440 SC=SCREEN(R0,C0,1) MOD 16
450 IF SC=2 THEN R0=H1:C0=H2:GOTO 530
460 COLOR 0
470 LOCATE H1,H2:PRINT CHR$(2);
480 COLOR 4
490 LOCATE R0,C0:PRINT CHR$(2);
500 H1=R0
510 H2=C0
520 IF R0=10 AND (C0=19 OR C0=20) THEN 700
530 RA=HR-(R0>HR)+(R0<HR)
540 CA=HC-(C0>HC)+(C0<HC)
550 RA=RA+(RA>22)-(RA<1)
560 CA=CA+(CA>40)-(CA<1)
570 CH=SCREEN(RA,CA,1) MOD 16
580 IF CH<>2 AND CH<>3 THEN 630
590 D=2*INT(RND*2)-1
600 IF F THEN RA=HR+D:CA=HC ELSE CA=HC+D:RA=HR
610 F=NOT F
620 GOTO 550
630 COLOR 0
640 LOCATE HR,HC:PRINT CHR$(15);
650 COLOR 6
660 LOCATE RA,CA:PRINT CHR$(15);
670 HR=RA
680 HC=CA
690 IF CA=C0 AND RA=R0 THEN 800 ELSE 270
```

```
700 CLS
710 COLOR 7
720 IF S>HS THEN HS=S
730 FOR T=1 TO 75
740 PRINT "YOU DID IT! ";
750 SOUND 440+(T*2),1
760 NEXT T
770 CLS
780 PRINT "YOUR SCORE IS";S;CHR$(29);"."
790 GOTO 840
800 CLS
810 COLOR 7
820 SOUND 440,5
830 PRINT "SORRY, YOU WERE CAUGHT!"
840 PRINT "THE HIGH SCORE IS";HS;CHR$(29);"."
850 PRINT "PRESS <ENTER> TO PLAY AGAIN.";
860 IF INKEY$<>CHR$(13) THEN 860 ELSE RESTORE
870 GOTO 130
1000 DATA 1000,13,19,0
2000 DATA 2,9,7,11,19,7,6,7,11,9,12,11,14,15,11,9,12
2010 DATA 16,9,12,23,6,7,28,9,12,28,14,15,28,2,9,32
2020 DATA 11,19,32,9,19,2,21,30,2,12,13,6,15,24,6
2030 DATA 26,27,6,17,22,9,18,21,12,12,13,15,15,24,15
2040 DATA 26,27,15,9,19,19,21,30,19
```

TI-99/4A/*Renegade Robot*

```
10 CALL CLEAR
20 PRINT "MAKE SURE THE <ALPHA LOCK>","KEY IS UP!"
30 PRINT
40 PRINT "DO YOU WANT TO USE THE"
50 PRINT "<K>EYBOARD OR THE","<J>OYSTICK?"
60 CALL KEY(3,KB,P)
70 IF (KB<>ASC("J"))*(KB<>ASC("K"))THEN 60
80 KB=(KB=ASC("J"))
90 CALL CLEAR
100 CALL SCREEN(2)
110 FOR KS=12 TO 16
120 READ KH,ST$,FG,BG
130 CALL CHAR(KH,ST$)
140 CALL COLOR(KS,FG,BG)
150 NEXT KS
160 READ S,HR,HC
170 CALL HCHAR(12,16,152,2)
180 FOR X=1 TO 24
190 READ A,B,C
200 FOR Y=A TO B
210 IF X>12 THEN 240
220 CALL HCHAR(Y,C,128)
230 GOTO 250
240 CALL HCHAR(C,Y,128)
250 NEXT Y
260 NEXT X
270 H1=INT(RND*22)+1
280 H2=INT(RND*3)-28*(RND>.5)+1
290 RO=H1
300 CO=H2
310 S=S-1
```

```
320 IF KB=0 THEN 370
330 CALL JOYST(1,J1,J2)
340 RO=RO-(J2=-4)+(J2=4)
350 CO=CO-(J1=4)+(J1=-4)
360 GOTO 400
370 CALL KEY(3,J,P)
380 RO=H1-((J=44)+(J=46)+(J=77))+((J=73)+(J=79)+(J=85)
)
390 CO=H2-((J=46)+(J=76)+(J=79))+((J=74)+(J=77)+(J=85)
)
400 RO=RO+(RO>24)-(RO<1)
410 CO=CO+(CO>32)-(CO<1)
420 CALL GCHAR(RO,CO,SC)
430 IF SC<>128 THEN 470
440 RO=H1
450 CO=H2
460 GOTO 520
470 CALL HCHAR(H1,H2,120)
480 CALL HCHAR(RO,CO,136)
490 H1=RO
500 H2=CO
510 IF SC=152 THEN 730
520 RA=HR-(RO>HR)+(RO<HR)
530 CA=HC-(CO>HC)+(CO<HC)
540 RA=RA+(RA>24)-(RA<1)
550 CA=CA+(CA>32)-(CA<1)
560 CALL GCHAR(RA,CA,CH)
570 IF (CH<>128)*(CH<>152)THEN 670
580 D=2*INT(RND*2)-1
590 IF F=0 THEN 630
600 RA=HR+D
610 CA=HC
620 GOTO 650
630 CA=HC+D
640 RA=HR
650 F=1+(F>0)
660 GOTO 540
670 CALL HCHAR(HR,HC,120)
680 CALL HCHAR(RA,CA,144)
690 HR=RA
700 HC=CA
710 IF (CA=CO)*(RA=RO)THEN 860
720 GOTO 310
730 CALL CLEAR
740 CALL SCREEN(12)
750 IF S<HS THEN 770
760 HS=S
770 PRINT TAB(8);"YOU DID IT!"
780 FOR T=1 TO 24
790 PRINT
800 CALL SOUND(2,T*200,1)
810 CALL SCREEN(INT(RND*7)+10)
820 NEXT T
830 CALL SCREEN(12)
840 PRINT "YOUR SCORE IS ";STR$(S);"."
850 GOTO 900
860 CALL CLEAR
870 CALL SCREEN(12)
```

```
880 CALL SOUND(10,440,4)
890 PRINT "SORRY, YOU WERE CAUGHT!"
900 PRINT "THE HIGH SCORE IS ";STR$(HS);"."
910 PRINT "PRESS <ENTER> TO","PLAY AGAIN.";
920 CALL KEY(3,K,P)
930 IF K<>13 THEN 920
940 RESTORE
950 GOTO 90
1000 DATA 120,FFFFFFFFFFFFFFFF,2,2,128
1010 DATA FFFFFFFFFFFFFFFF,6,6,136,18183C3C3C2424
1020 DATA 12,1,144,1818FF3C3C2424,9,1,152
1030 DATA FFFFFFFFFFFFFFFF,3,3
2000 DATA 1000,17,16,4,12,5,14,21
3000 DATA 5,8,9,9,11,14,9,16,17,9,11,14,13,11,14,20
3010 DATA 8,9,24,11,14,24,16,17,24,4,12,28,14,21,28
3020 DATA 7,15,4,18,26,4,10,11,8,13,20,8,22,23,8,13
3030 DATA 20,11,15,18,14,10,10,17,12,21,17,23,23
3040 DATA 17,7,15,21,18,26,21
```

Timex Sinclair 1000 w/16K RAM Pack & Timex Sinclair 1500/
Renegade Robot

```
10 SLOW
20 PRINT AT 4,2;"HERE ARE YOUR CONTROL KEYS:"
30 PRINT AT 6,13;"U I O"
40 PRINT AT 7,13;"J   L"
50 PRINT AT 8,13;"N M ."
60 PRINT AT 10,2;"PRESS <ENTER> TO CONTINUE."
70 LET K$=INKEY$
80 IF K$<>CHR$ 118 THEN GOTO 70
90 CLS
100 FAST
110 LET SC=PEEK 16396+256*PEEK 16397+1
120 LET S=1000
130 LET HR=13
140 LET HC=15
150 LET F=0
160 LET HS=0
170 LET P1=1
180 LET P2=1
190 LET J=0
200 LET D$="6,25,3,10,21,6,12,19,8,14,17,11,10,21,14,6
,25,17,3,9,4,11,17,4,6,9,8,11,14,8,8,11,12,8,11,19,6,9
,23,11,14,23,3,9,27,11,17,27,"
210 PRINT AT 9,15;CHR$ 136
220 PRINT AT 9,16;CHR$ 136
230 FOR X=1 TO 16
240 GOSUB 1000
250 LET A=VAL N$
260 GOSUB 1000
270 LET B=VAL N$
280 GOSUB 1000
290 LET C=VAL N$
300 FOR Y=A TO B
310 IF X<=6 THEN PRINT AT C,Y;CHR$ 128
320 IF X>6 THEN PRINT AT Y,C;CHR$ 128
330 NEXT Y
340 NEXT X
```

```
350 LET H1=INT (RND*20)
360 LET H2=INT (RND*3)+28*(RND>0.5)
370 SLOW
380 PRINT AT 21,14;S;" "
390 LET S=S-1
400 LET J$=INKEY$
410 IF J$<>"" THEN LET J=CODE J$
420 LET RO=H1+(J=27 OR J=50 OR J=51)-(J=46 OR J=52 OR
J=58)
430 LET CO=H2+(J=27 OR J=49 OR J=52)-(J=47 OR J=51 OR
J=58)
440 LET RO=RO-(RO>20)+(RO<0)
450 LET CO=CO-(CO>31)+(CO<0)
460 IF PEEK (SC+RO*33+CO)<>128 THEN GOTO 500
470 LET RO=H1
480 LET CO=H2
490 GOTO 550
500 PRINT AT H1,H2;CHR$ 0
510 PRINT AT RO,CO;CHR$ 23
520 LET H1=RO
530 LET H2=CO
540 IF RO=9 AND (CO=15 OR CO=16) THEN GOTO 740
550 LET RA=HR+(RO>HR)-(RO<HR)
560 LET CA=HC+(CO>HC)-(CO<HC)
570 LET RA=RA-(RA>20)+(RA<0)
580 LET CA=CA-(CA>31)+(CA<0)
590 LET CH=PEEK (SC+CA+33*RA)
600 IF CH<>128 AND CH<>136 THEN GOTO 680
610 LET RA=HR
620 LET CA=HC
630 LET D=2*INT (RND*2)-1
640 IF F THEN LET RA=HR+D
650 IF NOT F THEN LET CA=HC+D
660 LET F=NOT F
670 GOTO 580
680 PRINT AT HR,HC;CHR$ 0
690 PRINT AT RA,CA;CHR$ 134
700 LET HR=RA
710 LET HC=CA
720 IF CO=CA AND RO=RA THEN GOTO 820
730 GOTO 380
740 CLS
750 IF S>HS THEN LET HS=S
760 FOR T=1 TO 50
770 PRINT "YOU DID IT. ";
780 NEXT T
790 CLS
800 PRINT "YOUR SCORE IS ";S;"."
810 GOTO 840
820 CLS
830 PRINT "SORRY, YOU WERE CAUGHT."
840 PRINT "THE HIGH SCORE IS ";HS;"."
850 PRINT "PRESS <ENTER> TO PLAY AGAIN."
860 LET K$=INKEY$
870 IF K$<>CHR$ 118 THEN GOTO 860
880 GOTO 90
1000 IF D$(P1)="," THEN GOTO 1030
1010 LET P1=P1+1
```

```
102Ø GOTO 1ØØØ
103Ø LET N$=D$(P2 TO P1-1)
104Ø LET P1=P1+1
105Ø LET P2=P1
106Ø RETURN
```

TRS-80 Color Computer/*Renegade Robot*

```
1Ø CLS
2Ø PRINT "DO YOU WANT TO USE THE"
3Ø PRINT "<K>EYBOARD OR THE <J>OYSTICK?";
4Ø KB$=INKEY$
5Ø IF KB$<>"K" AND KB$<>"J" THEN 4Ø ELSE KB=(KB$="J")
6Ø CLS
7Ø READ SC,S,HR,HC,F
8Ø FOR X=15 TO 17
9Ø PRINT @X+192,CHR$(154);
1ØØ NEXT X
11Ø FOR X=1 TO 18
12Ø READ A,B,C
13Ø FOR Y=A TO B
14Ø IF X<=8 THEN PRINT @C+32*Y,CHR$(175);:GOTO 16Ø
15Ø PRINT @Y+32*C,CHR$(175);
16Ø NEXT Y
17Ø NEXT X
18Ø H1=RND(16)-1
19Ø H2=RND(5)-1-27*(RND(Ø)>.5)
2ØØ PRINT @493,S;" ";
21Ø S=S-1
22Ø IF KB=Ø THEN 28Ø
23Ø JO=JOYSTK(Ø)
24Ø J1=JOYSTK(1)
25Ø RO=H1+(J1<2Ø)-(J1>43)
26Ø CO=H2+(JO<2Ø)-(JO>43)
27Ø GOTO 33Ø
28Ø FOR Q=1 TO 2ØØ:J$=INKEY$:IF J$="" THEN NEXT Q
29Ø IF J$="" THEN J=Ø:GOTO 31Ø
3ØØ J=ASC(J$)
31Ø RO=H1-(J=44 OR J=46 OR J=77)+(J=73 OR J=79 OR J=85
)
32Ø CO=H2-(J=46 OR J=76 OR J=79)+(J=74 OR J=77 OR J=85
)
33Ø RO=RO+(RO>14)-(RO<Ø)
34Ø CO=CO+(CO>31)-(CO<Ø)
35Ø IF PEEK(SC+CO+32*RO)=175 THEN RO=H1:CO=H2:GOTO 41Ø
36Ø PRINT @H2+32*H1,CHR$(143);
37Ø PRINT @CO+32*RO,CHR$(159);
38Ø H1=RO
39Ø H2=CO
4ØØ IF RO=6 AND (CO>=15 AND CO<=17) THEN 57Ø
41Ø RA=HR-(RO>HR)+(RO<HR)
42Ø CA=HC-(CO>HC)+(CO<HC)
43Ø RA=RA+(RA>14)-(RA<Ø)
44Ø CA=CA+(CA>31)-(CA<Ø)
45Ø CH=PEEK(SC+CA+32*RA)
46Ø IF CH<>175 AND CH<>154 THEN 51Ø
47Ø D=2*INT(RND(Ø)*2)-1
48Ø IF F THEN RA=HR+D:CA=HC ELSE CA=HC+D:RA=HR
```

```
490 F=NOT F
500 GOTO 430
510 PRINT @HC+32*HR,CHR$(143);
520 PRINT @CA+32*RA,CHR$(189);
530 HR=RA
540 HC=CA
550 IF CA=CO AND RA=RO THEN 660
560 GOTO 200
570 CLS
580 IF S>HS THEN HS=S
590 FOR T=210 TO 245
600 PRINT "YOU DID IT! ";
610 SOUND T,1
620 NEXT T
630 CLS
640 PRINT "YOUR SCORE IS";STR$(S);"."
650 GOTO 690
660 CLS
670 SOUND 5,5
680 PRINT "SORRY, YOU WERE CAUGHT!"
690 PRINT "THE HIGH SCORE IS";STR$(HS);"."
700 PRINT "PRESS <ENTER> TO PLAY AGAIN."
710 K$=INKEY$
720 IF K$<>CHR$(13) THEN 710
730 RESTORE
740 GOTO 60
1000 DATA 1024,1000,11,12,0
2000 DATA 2,3,5,5,9,5,11,12,5,5,9,10
2010 DATA 5,9,22,2,3,26,5,9,26,11,12,26
2020 DATA 6,7,2,9,15,2,17,22,2,24,26,2
2030 DATA 10,22,5,12,20,9,6,7,12,9,15,12
2040 DATA 17,22,12,24,25,12
```

TRS-80 Model III/*Renegade Robot*

```
10 CLS
20 READ SC,S,HR,HC,F
30 FOR X=30 TO 33
40 PRINT @X+448,CHR$(149);
50 NEXT X
60 FOR X=1 TO 20
70 READ A,B,C
80 FOR Y=A TO B
90 IF X<=8 THEN PRINT @C+64*Y,CHR$(191);:GOTO 110
100 PRINT @Y+64*C,CHR$(191);
110 NEXT Y
120 NEXT X
130 H1=RND(16)-1
140 H2=RND(10)-1-54*(RND(0)>.5)
150 PRINT @990,S;" ";
160 S=S-1
170 J$=INKEY$
180 IF J$="" THEN J=0:GOTO 200
190 J=ASC(J$)
200 RO=H1-(J=44 OR J=46 OR J=77)+(J=73 OR J=79 OR J=85)
210 CO=H2-(J=46 OR J=76 OR J=79)+(J=74 OR J=77 OR J=85)
220 RO=RO+(RO>15)-(RO<0)
230 CO=CO+(CO>63)-(CO<0)
```

```
240 IF PEEK(SC+CO+64*RO)=191 THEN RO=H1:CO=H2:GOTO 300
250 PRINT @H2+64*H1,CHR$(128);
260 PRINT @CO+64*RO,CHR$(183);
270 H1=RO
280 H2=CO
290 IF RO=7 AND (CO>=30 AND CO<=33) THEN 450
300 RA=HR-(RO>HR)+(RO<HR)
310 CA=HC-(CO>HC)+(CO<HC)
320 RA=RA+(RA>15)-(RA<0)
330 CA=CA+(CA>63)-(CA<0)
340 CH=PEEK(SC+CA+64*RA)
350 IF CH<>149 AND CH<>191 THEN 400
360 D=2*INT(RND(0)*2)-1
370 IF F THEN RA=HR+D:CA=HC ELSE CA=HC+D:RA=HR
380 F=NOT F
390 GOTO 320
400 PRINT @HC+64*HR,CHR$(128);
410 PRINT @CA+64*RA,CHR$(190);
420 HR=RA
430 HC=CA
440 IF CA=CO AND RA=RO THEN 530 ELSE 150
450 CLS
460 IF S>HS THEN HS=S
470 FOR T=1 TO 150
480 PRINT "YOU DID IT! ";
490 NEXT T
500 CLS
510 PRINT "YOUR SCORE IS";STR$(HS);"."
520 GOTO 550
530 CLS
540 PRINT "SORRY, YOU WERE CAUGHT!"
550 PRINT "THE HIGH SCORE IS";STR$(HS);"."
560 PRINT "PRESS <ENTER> TO PLAY AGAIN."
570 K$=INKEY$
580 IF K$<>CHR$(13) THEN 570 ELSE RESTORE
590 GOTO 10
1000 DATA 15360,1000,10,32,0
2000 DATA 2,6,10,8,13,10,6,9,14,6,9,21,6,9,42
2010 DATA 6,9,49,2,6,53,8,13,53,12,30,2,32,51,2
2020 DATA 14,17,4,19,44,4,46,49,4,21,42,6,25,38,9
2030 DATA 14,17,11,19,44,11,46,49,11,12,30,13,32
2040 DATA 51,13,149,170,282,293,735,853,873
```

VIC-20/*Renegade Robot*

```
10 FOR X=1 TO 22
20 R$=R$+CHR$(17)
30 NEXT X
40 PRINT CHR$(147);"DO YOU WANT TO USE"
50 PRINT "THE <K>EYBOARD OR","THE <J>OYSTICK?";
60 GET KB$
70 IF KB$<>"K" AND KB$<>"J" THEN 60
80 KB=(KB$="J")
90 PRINT CHR$(147);
100 READ SC,CL,S,HR,HC,F
110 POKE 36879,11
120 POKE 38608,7
130 POKE 7888,102
```

```
140 POKE 38609,7
150 POKE 7889,102
160 PRINT CHR$(5);
170 FOR X=1 TO 24
180 READ A,B,C
190 FOR Y=A TO B
200 IF X<=12 THEN POKE SC+C+22*Y,160:POKE CL+C+22*Y,6:
GOTO 220
210 POKE SC+Y+22*C,160:POKE CL+Y+22*C,6
220 NEXT Y
230 NEXT X
240 H1=INT(RND(1)*21)
250 H2=INT(RND(1)*2)-20*(RND(1)>.5)
260 PRINT CHR$(19);R$;TAB(8);STR$(S);" ";
270 S=S-1
280 IF KB=0 THEN 360
290 POKE 37154,127
300 J=PEEK(37152) AND 128
310 POKE 37154,255
320 J=J OR (PEEK(37137) AND 127)
330 R0=H1+SGN(J AND 4)-SGN(J AND 8)
340 C0=H2+SGN(J AND 16)-SGN(J AND 128)
350 GOTO 410
360 GET J$
370 IF J$="" THEN J=0:GOTO 390
380 J=ASC(J$)
390 R0=H1-(J=44 OR J=46 OR J=77)+(J=73 OR J=79 OR J=85
)
400 C0=H2-(J=46 OR J=76 OR J=79)+(J=74 OR J=77 OR J=85
)
410 R0=R0+(R0>21)-(R0<0)
420 C0=C0+(C0>21)-(C0<0)
430 IF PEEK(SC+C0+22*R0)=160 THEN R0=H1:C0=H2:GOTO 510
440 POKE SC+H2+22*H1,42
450 POKE CL+H2+22*H1,0
460 POKE SC+C0+22*R0,42
470 POKE CL+C0+22*R0,7
480 H1=R0
490 H2=C0
500 IF R0=9 AND (C0=10 OR C0=11) THEN 700
510 RA=HR-(R0>HR)+(R0<HR)
520 CA=HC-(C0>HC)+(C0<HC)
530 RA=RA+(RA>21)-(RA<0)
540 CA=CA+(CA>21)-(CA<0)
550 CH=PEEK(SC+CA+22*RA)
560 IF CH<>160 AND CH<>102 THEN 620
570 D=2*INT(RND(1)*2)-1
580 IF F THEN RA=HR+D:CA=HC:GOTO 600
590 CA=HC+D:RA=HR
600 F=NOT F
610 GOTO 530
620 POKE SC+HC+22*HR,81
630 POKE CL+HC+22*HR,0
640 POKE SC+CA+22*RA,81
650 POKE CL+CA+22*RA,2
660 HR=RA
670 HC=CA
680 IF CA=C0 AND RA=R0 THEN 790
```

```
690 GOTO 260
700 PRINT CHR$(147);
710 IF S>HS THEN HS=S
720 POKE 36878,7
730 FOR T=180 TO 255
740 PRINT "YOU DID IT! ";
750 POKE 36876,T
760 NEXT T
770 PRINT CHR$(147);"YOUR SCORE IS";S;CHR$(157);"."
780 GOTO 820
790 POKE 36878,10
800 POKE 36876,235
810 PRINT CHR$(147);"YOU WERE CAUGHT!"
820 PRINT "HIGH SCORE IS";HS;CHR$(157);"."
830 PRINT "PRESS <RETURN> TO","PLAY AGAIN.";
840 POKE 36878,0
850 GET K$
860 IF K$<>CHR$(13) THEN 850
870 RESTORE
880 GOTO 90
1000 DATA 7680,38400,1000,16,7,0
2000 DATA 2,10,2,12,20,2,5,6,5,8,14,5,16,17
2010 DATA 5,8,14,8,8,14,13,5,6,16,8,14,16,16
2020 DATA 17,16,2,10,19,12,20,19,4,9,2,11,17
2030 DATA 2,6,6,5,8,13,5,15,15,5,8,13,8,10,11
2040 DATA 14,6,6,17,8,13,17,15,15,17,4,9,20
2050 DATA 11,17,20
```

ICE CREAM CONE

As you lie in your hammock on a hot summer's day, languidly fanning yourself with a copy of FAMILY COMPUTING, do you ever fantasize about eating a big, delicious, dripping ice cream cone? But does the thought of trudging through the hot streets to the neighborhood store require more energy than you can muster?

Well then, turn to your computer, select one of up to seven delicious flavors, and watch it dish up a treat that looks good enough to eat! (You may even get a surprise chocolate topping!)

ADAM/Ice Cream Cone

```
10 DIM scoop(2,22,2),cn(17,2),flav(8),fl$(8),ice(2)
20 FOR z = 1 TO 7
30 READ flav(z),fl$(z)
40 NEXT z
50 FOR x = 1 TO 2
60 FOR y = 24-12*x TO 33-11*x
70 FOR z = 1 TO 2
80 READ scoop(x,y,z)
90 NEXT z,y,x
100 FOR x = 1 TO 17
110 READ cn(x,1),cn(x,2)
120 NEXT x
130 TEXT
140 FOR x = 1 TO 7
150 PRINT x;" - ";fl$(x)
160 NEXT x
170 PRINT
180 PRINT "Please press the number of your";"choice."
190 FOR x = 1 TO 2
200 PRINT
210 PRINT "What flavor do you want for";SPC(4);"scoop
#";x;"? ";
220 GET a$
230 IF a$ < "1" OR a$ > "7" THEN 220
240 PRINT a$
250 ice(x) = VAL(a$)
260 NEXT x
270 FOR d = 1 TO 200
280 NEXT d
290 GR
300 COLOR= 13
310 FOR ro = 1 TO 17
320 FOR co = cn(ro,1) TO cn(ro,2)
330 PLOT co,ro+22
340 NEXT co,ro
350 FOR z = 1 TO 2
360 COLOR= flav(ice(z))
370 FOR ro = 24-12*z TO 33-11*z
380 FOR co = scoop(z,ro,1) TO scoop(z,ro,2)
390 PLOT co,ro
400 NEXT co,ro,z
410 IF RND(1) > 0.5 OR ice(2) = 2 THEN 470
420 COLOR= 8
```

```
430 FOR co = scoop(2,0,1) TO scoop(2,0,2)
440 FOR ro = 0 TO RND(1)*15
450 PLOT co,ro
460 NEXT ro,co
470 FOR d = 1 TO 400
480 NEXT d
490 PRINT TAB(5);"Please press any key for"
500 PRINT TAB(10);"another cone.";
510 GET a$
520 GOTO 130
1000 DATA 15,Vanilla,8,Chocolate,11,Raspberry,1,Cherry
1010 DATA 14,Blueberry,12,Mint,4,Pistachio
2000 DATA 15,23,14,24,13,25,13,25,12,26,12,26,12,26,12
2010 DATA 26,13,25,13,25,14,24,16,22,15,23,14,24,13,25
2020 DATA 13,25,12,26,12,26,12,26,12,26,13,25,13,25,13
2030 DATA 25,14,24,14,24,14,24,14,24,14,24,15,23,15,23
2040 DATA 16,22,16,22,16,22,17,21,17,21,17,21
2050 DATA 18,20,18,20,18,20,19,19,19,19
```

Apple/*Ice Cream Cone*

```
10 DIM SCOOP(2,22,2),CN(17,2),FLAV(8),FL$(8),ICE(2)
20 FOR I = 1 TO 29
30 READ S
40 POKE 767+I,S
50 NEXT I
60 FOR Z = 1 TO 7
70 READ FLAV(Z),FL$(Z)
80 NEXT Z
90 FOR X = 1 TO 2
100 FOR Y = 24-12*X TO 33-11*X
110 FOR Z = 1 TO 2
120 READ SCOOP(X,Y,Z)
130 NEXT Z,Y,X
140 FOR X = 1 TO 17
150 READ CN(X,1),CN(X,2)
160 NEXT X
170 TEXT
180 HOME
190 FOR X = 1 TO 7
200 PRINT X;" - ";FL$(X)
210 NEXT X
220 PRINT
230 PRINT "PLEASE PRESS THE NUMBER OF YOUR CHOICE."
240 FOR X = 1 TO 2
250 PRINT
260 PRINT "WHAT FLAVOR DO YOU WANT FOR SCOOP #";X;"? "
;
270 GET A$
280 IF A$ < "1" OR A$ > "7" THEN 270
290 PRINT A$
300 ICE(X) = VAL(A$)
310 NEXT X
320 FOR D = 1 TO 200
330 NEXT D
340 GR
```

```
350 COLOR= 13
360 FOR RO = 1 TO 17
370 FOR CO = CN(RO,1) TO CN(RO,2)
380 PLOT CO,RO+22
390 NEXT CO,RO
400 FOR Z = 1 TO 2
410 COLOR= FLAV(ICE(Z))
420 FOR RO = 24-12*Z TO 33-11*Z
430 FOR CO = SCOOP(Z,RO,1) TO SCOOP(Z,RO,2)
440 PLOT CO,RO
450 POKE 6,Z
460 POKE 8,240-CO*ICE(Z)
470 CALL 768
480 NEXT CO,RO,Z
490 IF RND(1) > 0.5 OR ICE(2) = 2 THEN 580
500 COLOR= 8
510 FOR CO = SCOOP(2,0,1) TO SCOOP(2,0,2)
520 FOR RO = 0 TO RND(1)*15
530 PLOT CO,RO
539 REM --PLAY A NOTE--
540 POKE 6,2
550 POKE 8,RO*10+100
560 CALL 768
570 NEXT RO,CO
580 FOR D = 1 TO 400
590 NEXT D
600 PRINT "PLEASE PRESS ANY KEY FOR ANOTHER CONE.";
610 GET A$
620 GOTO 170
1000 DATA 165,8,74,133,10,164,8,173,48,192
1010 DATA 136,234,234,208,251,165,7,56,229
1020 DATA 10,133,7,176,237,198,6,208,233,96
2000 DATA 15,VANILLA,8,CHOCOLATE,11,RASPBERRY,1,CHERRY
2010 DATA 14,BLUEBERRY,12,MINT,4,PISTACHIO
3000 DATA 15,23,14,24,13,25,13,25,12,26,12,26,12,26,12
3010 DATA 26,13,25,13,25,14,24,16,22,15,23,14,24,13,25
3020 DATA 13,25,12,26,12,26,12,26,12,26,13,25,13,25,13
3030 DATA 25,14,24,14,24,14,24,14,24,14,24,15,23,15,23
3040 DATA 16,22,16,22,16,22,17,21,17,21,17,21
3050 DATA 18,20,18,20,18,20,19,19,19,19
```

Atari/*Ice Cream Cone*

```
10 DIM FLAVOR(7,2),ICE(2),FL$(63),T$(9)
19 REM --SET DISPLAY TO FORTY COLUMNS--
20 POKE 82,0
30 OPEN #1,4,0,"K:"
40 FOR X=1 TO 63
50 FL$(X)=" "
60 NEXT X
70 FOR X=1 TO 7
80 READ A,B,T$
90 FLAVOR(X,1)=A
100 FLAVOR(X,2)=B
110 FL$(9*X-8)=T$
120 NEXT X
130 PRINT CHR$(125);
140 FOR X=1 TO 7
```

```
150 PRINT X;" - ";FL$(9*X-8,9*X)
160 NEXT X
170 PRINT CHR$(155);"PLEASE PRESS THE NUMBER OF YOUR C
HOICE."
180 FOR X=1 TO 2
190 PRINT CHR$(155);"WHAT FLAVOR DO YOU WANT FOR SCOOP
 #";X;"? ";
200 GET #1,A
210 IF A<ASC("1") OR A>ASC("7") THEN 200
220 PRINT CHR$(A)
230 ICE(X)=VAL(CHR$(A))
240 NEXT X
250 FOR D=1 TO 200
260 NEXT D
270 GRAPHICS 5+16
280 SETCOLOR 0,1,2
290 SETCOLOR 1,FLAVOR(ICE(1),1),FLAVOR(ICE(1),2)
300 SETCOLOR 2,FLAVOR(ICE(2),1),FLAVOR(ICE(2),2)
310 COLOR 1
320 FOR X=18 TO 39 STEP 3
330 FOR Y=X TO X+2
340 PLOT 38-(39-X)/3,Y
350 DRAWTO 38+(39-X)/3,Y
360 NEXT Y
370 NEXT X
380 FOR N=2 TO 3
390 COLOR N
400 W=7
410 FOR Y=2+8*(3-N) TO 2+8*(4-N)
420 SOUND 0,Y,10,10
430 W=W+((Y-9+8*(N=3))<=3)-((Y-9+8*(N=3))>=6)
440 PLOT 38-W,Y
450 DRAWTO 38+W,Y
460 NEXT Y
470 SOUND 0,0,0,0
480 NEXT N
490 IF RND(0)>0.5 THEN 600
500 COLOR 1
510 Q=3
520 FOR X=27 TO 49
530 Q=Q-(X<=29)+(X>=48)
540 Y=INT(RND(0)*10)+4
550 PLOT X,Q+2
560 DRAWTO X,Y+2
570 SOUND 0,Y,10,10
580 NEXT X
590 SOUND 0,0,0,0
599 REM --CLEAR KEYBOARD BUFFER--
600 POKE 764,255
610 GET #1,A
620 GOTO 130
1000 DATA 0,14,VANILLA,3,4,ORANGE
1010 DATA 3,2,RASPBERRY,4,3,CHERRY
1020 DATA 7,5,BLUEBERRY,13,5,MINT,14,5,PISTACHIO
```

Commodore 64/Ice Cream Cone

```
10 DIM SCOOP(2,12,2),CN(12,2),FLAV(8),FL$(8),ICE(2)
20 READ SB,CB,S
30 FOR Z=1 TO 7
40 READ FLAV(Z),FL$(Z)
50 NEXT Z
60 FOR X=1 TO 2
70 FOR Y=12-6*X TO 19-7*X
80 FOR Z=1 TO 2
90 READ SCOOP(X,Y,Z)
100 NEXT Z,Y,X
110 FOR X=1 TO 12
120 READ CN(X,1),CN(X,2)
130 NEXT X
140 POKE 53280,0
150 POKE 53281,0
160 FOR E=S TO S+28
170 POKE E,0
180 NEXT E
190 POKE S+24,15
200 POKE S+5,17
210 POKE S+6,85
220 PRINT CHR$(147);
230 FOR X=1 TO 7
240 PRINT X;"- ";FL$(X)
250 NEXT X
260 PRINT
270 PRINT "PLEASE PRESS THE NUMBER OF YOUR CHOICE."
280 FOR X=1 TO 2
290 PRINT
300 PRINT "WHAT FLAVOR DO YOU WANT FOR SCOOP #";CHR$(X+48);"?";
310 GET A$
320 IF A$<"1" OR A$>"7" THEN 310
330 PRINT A$
340 ICE(X)=VAL(A$)
350 NEXT X
360 FOR D=1 TO 200
370 NEXT D
380 PRINT CHR$(147);
390 FOR RO=1 TO 12
400 FOR CO=CN(RO,1) TO CN(RO,2)
410 POKE SB+CO+40*(RO+12),86
420 POKE CB+CO+40*(RO+12),7
430 NEXT CO,RO
440 POKE S+4,33
450 FOR Z=1 TO 2
460 FOR RO=12-6*Z TO 19-7*Z
470 FOR CO=SCOOP(Z,RO,1) TO SCOOP(Z,RO,2)
480 POKE S+1,CO*ICE(Z)
490 POKE S,CO*ICE(Z)
500 POKE SB+CO+40*RO,160
510 POKE CB+CO+40*RO,FLAV(ICE(Z))
520 NEXT CO,RO,Z
530 IF RND(1)>0.5 OR ICE(2)=2 THEN 610
539 REM --DRAW CHOCOLATE TOPPING--
540 FOR CO=SCOOP(2,0,1) TO SCOOP(2,0,2)
550 FOR RO=0 TO INT(RND(1)*10)
560 POKE S+1,RND(1)*29
```

```
570 POKE S,RO*3
580 POKE SB+CO+40*RO,160
590 POKE CB+CO+40*RO,9
600 NEXT RO,CO
610 POKE S+4,0
620 FOR D=1 TO 400
630 NEXT D
640 POKE 198,0
650 POKE 214,23
660 PRINT
670 PRINT TAB(4);"PRESS ANY KEY";TAB(22);"FOR ANOTHER CONE.";
680 GET A$
690 IF A$="" THEN 680
700 GOTO 220
1000 DATA 1024,55296,54272
2000 DATA 1,VANILLA,9,CHOCOLATE,2,RASPBERRY,10,CHERRY
2010 DATA 6,BLUEBERRY,14,MINT,13,PISTACHIO
3000 DATA 15,23,14,24,13,25,13,25,13,25,14,24,15,23
3010 DATA 15,23,14,24,13,25,13,25,13,25,14,24,15,23
3020 DATA 15,23,15,23,16,22,16,22,17,21,17,21,17
3030 DATA 21,17,21,18,20,18,20,19,19
```

IBM PC w/Color Graphics Adapter & IBM PC*jr*/*Ice Cream Cone*

```
10 DIM SCOOP(2,12,2),CN(11,2),FLAV(8),FL$(8),ICE(2)
20 SCREEN 0,1
30 COLOR 7,0
40 WIDTH 40
50 LOCATE ,,0
60 KEY OFF
70 RANDOMIZE
80 FOR Z=1 TO 7
90 READ FLAV(Z),FL$(Z)
100 NEXT Z
110 FOR X=1 TO 2
120 FOR Y=12-6*X TO 19-7*X
130 FOR Z=1 TO 2
140 READ SCOOP(X,Y,Z)
150 NEXT Z,Y,X
160 FOR X=1 TO 11
170 READ CN(X,1),CN(X,2)
180 NEXT X
189 REM --ASK FOR FLAVORS--
190 CLS
200 FOR X=1 TO 7
210 PRINT X;"- ";FL$(X)
220 NEXT X
230 PRINT
240 PRINT "PLEASE PRESS THE NUMBER OF YOUR CHOICE."
250 FOR X=1 TO 2
260 PRINT
270 PRINT "WHAT FLAVOR DO YOU WANT FOR SCOOP #";CHR$(X+48);"? ";
280 A$=INKEY$
290 IF A$<"1" OR A$>"7" THEN 280
300 PRINT A$
310 ICE(X)=VAL(A$)
320 NEXT X
330 FOR D=1 TO 400
```

```
340 NEXT D
349 REM --DRAW CONE--
350 CLS
360 COLOR 6,0
370 FOR RO=1 TO 11
380 FOR CO=CN(RO,1) TO CN(RO,2)
390 LOCATE RO+13,CO
400 PRINT "X";
410 NEXT CO,RO
419 REM --DRAW SCOOPS--
420 FOR Z=1 TO 2
430 FOR RO=12-6*Z TO 19-7*Z
440 FOR CO=SCOOP(Z,RO,1) TO SCOOP(Z,RO,2)
450 COLOR FLAV(ICE(Z)),0
460 LOCATE RO+1,CO
470 SOUND 100*CO,.5
480 PRINT CHR$(219);
490 NEXT CO,RO,Z
500 IF RND>.5 OR ICE(2)=3 THEN 580
510 COLOR 6,0
520 FOR CO=SCOOP(2,0,1) TO SCOOP(2,0,2)
530 FOR RO=1 TO RND*12
540 LOCATE RO,CO
550 SOUND RO*100+200,.5
560 PRINT CHR$(219);
570 NEXT RO,CO
580 FOR D=1 TO 800
590 NEXT D
600 COLOR 7,0
610 LOCATE 25,2
620 PRINT "PLEASE PRESS ANY KEY FOR ANOTHER CONE.";
630 A$=INKEY$
640 IF A$="" THEN 630 ELSE 190
1000 DATA 14,BUTTERSCOTCH,4,CHERRY,6,CHOCOLATE
1010 DATA 2,MINT,10,PISTACHIO,12,RASPBERRY,7,VANILLA
2000 DATA 15,23,14,24,13,25,13,25,13,25,14,24,15,23
2010 DATA 15,23,14,24,13,25,13,25,13,25,14,24,15,23
2020 DATA 16,22,16,22,17,21,17,21,17,21,17
2030 DATA 21,18,20,18,20,18,20,19,19
```

TI-99/4A/*Ice Cream Cone*

```
10 DIM SCOOP(2,13,2),CN(10,2),FLAV(8),F$(8),ICE(2)
20 CALL CLEAR
30 A$="FFFFFFFFFFFFFFFF"
40 CALL CHAR(128,A$)
50 CALL CHAR(136,"8142241818244181")
60 CALL CHAR(144,A$)
70 CALL CHAR(152,A$)
80 CALL COLOR(13,11,11)
90 CALL COLOR(14,11,1)
100 FOR Z=1 TO 7
110 READ FLAV(Z),F$(Z)
120 NEXT Z
130 FOR X=1 TO 2
140 FOR Y=14-6*X TO 19-6*X
150 FOR Z=1 TO 2
```

```
160 READ SCOOP(X,Y,Z)
170 NEXT Z
180 NEXT Y
190 NEXT X
200 FOR X=1 TO 10
210 READ CN(X,1),CN(X,2)
220 NEXT X
230 FOR I=1 TO 8
240 CALL COLOR(I,15,1)
250 NEXT I
260 CALL SCREEN(2)
270 CALL CLEAR
280 FOR X=1 TO 7
290 PRINT X;"- ";F$(X)
300 NEXT X
310 PRINT
320 PRINT "PLEASE PRESS THE NUMBER OF","YOUR CHOICE."
330 FOR X=1 TO 2
340 PRINT
350 PRINT "WHAT FLAVOR DO YOU WANT FOR SCOOP #";CHR$(X
+48);"? ";
360 CALL KEY(3,K,P)
370 IF (K<49)+(K>55)THEN 360
380 ICE(X)=K-48
390 PRINT ICE(X)
400 NEXT X
410 FOR D=1 TO 100
420 NEXT D
430 CALL CLEAR
440 FOR RO=1 TO 10
450 FOR CO=CN(RO,1)TO CN(RO,2)
460 CALL HCHAR(RO+13,CO,136)
470 NEXT CO
480 NEXT RO
490 FOR Z=1 TO 2
500 CALL COLOR(14+Z,FLAV(ICE(Z)),1)
510 FOR RO=14-6*Z TO 19-6*Z
520 FOR CO=SCOOP(Z,RO,1)TO SCOOP(Z,RO,2)
530 CALL SOUND(1,CO*CO+200,2)
540 CALL HCHAR(RO,CO,136+8*Z)
550 NEXT CO
560 NEXT RO
570 NEXT Z
580 RANDOMIZE
590 IF (RND>.5)+(ICE(2)=2)THEN 670
600 FOR CO=SCOOP(2,2,1)TO SCOOP(2,2,2)
610 RANDOMIZE
620 FOR RO=2 TO 10*RND+2
630 CALL SOUND(150,RO*50+90,1)
640 CALL HCHAR(RO,CO,128)
650 NEXT RO
660 NEXT CO
670 PRINT "PRESS ANY KEY FOR ANOTHER.";
680 CALL KEY(3,K,P)
690 IF P=0 THEN 680 ELSE 260
1000 DATA 16,VANILLA,11,CHOCOLATE,9,RASPBERRY,7,CHERRY
1010 DATA 5,BLUEBERRY,4,MINT,3,PISTACHIO
2000 DATA 12,20,11,21,10,22,10,22,11,21,12,20
```

```
2010 DATA 13,19,12,20,11,21,11,21,12,20
2020 DATA 13,19,12,20,13,19,13,19,14,18
2030 DATA 14,18,14,18,15,17,15,17,16,16,16,16
```

Timex Sinclair 1000 w/16K RAM Pack & Timex Sinclair 1500/*Ice Cream Cone*

```
10 SLOW
20 PRINT "1 - CHOCOLATE"
30 PRINT "2 - PEANUT BUTTER FUDGE"
40 PRINT "3 - BUTTERSCOTCH"
50 PRINT "4 - PEPPERMINT"
60 PRINT "5 - MOLASSES LACE"
70 PRINT "6 - CANDY STRIPE"
80 PRINT "7 - CHOCOLATE CHIP"
90 PRINT
100 PRINT "PLEASE PRESS THE NUMBER OF YOUR CHOICE."
110 FOR X=1 TO 2
120 PRINT
130 PRINT "WHAT FLAVOR DO YOU WANT"
140 PRINT "FOR SCOOP NUMBER ";X;"? "
150 LET R$=INKEY$
160 IF R$="" THEN GOTO 150
170 IF CODE R$<29 OR CODE R$>35 THEN GOTO 150
180 PRINT R$
190 LET R=VAL R$+127
200 IF R=129 THEN LET R=137
210 IF R=132 THEN LET R=10
220 IF X=1 THEN LET I$=CHR$ R
230 IF X=2 THEN LET J$=CHR$ R
240 NEXT X
250 CLS
260 LET A=15
270 LET B=A
280 FOR R=20 TO 11 STEP -2
290 FOR C=A TO B
300 PRINT AT R,C;CHR$ 136
310 PRINT AT R-1,C;CHR$ 136
320 NEXT C
330 LET A=A-1
340 LET B=B+1
350 NEXT R
360 FOR C=9 TO 21
370 PRINT AT 7,C;I$
380 PRINT AT 8,C;I$
390 IF C<10 OR C>20 THEN GOTO 420
400 PRINT AT 6,C;I$
410 PRINT AT 9,C;I$
420 IF C<11 OR C>19 THEN GOTO 450
430 PRINT AT 5,C;I$
440 PRINT AT 10,C;I$
450 NEXT C
460 FOR C=10 TO 20
470 PRINT AT 2,C;J$
480 PRINT AT 3,C;J$
490 IF C<11 OR C>19 THEN GOTO 520
500 PRINT AT 1,C;J$
```

```
510 PRINT AT 4,C;J$
520 IF C<12 OR C>18 THEN GOTO 540
530 PRINT AT 0,C;J$
540 NEXT C
550 PAUSE 123
560 PRINT AT 21,1;"PRESS ANY KEY FOR ANOTHER CONE."
570 LET R$=INKEY$
580 IF R$="" THEN GOTO 570
590 CLS
600 GOTO 20
```

TRS-80 Color Computer/*Ice Cream Cone*

```
10 DIM SCOOP(2,8,2),CN(8,2),FLAV(8),FL$(8),ICE(2)
20 FOR Z=1 TO 7
30 READ FLAV(Z),FL$(Z)
40 NEXT Z
50 FOR X=1 TO 2
60 FOR Y=8-4*X TO 11-4*X
70 FOR Z=1 TO 2
80 READ SCOOP(X,Y,Z)
90 NEXT Z,Y,X
100 FOR X=1 TO 7
110 READ CN(X,1),CN(X,2)
120 NEXT X
130 CLS
140 FOR X=1 TO 7
150 PRINT X;"- ";FL$(X)
160 NEXT X
170 PRINT "PLEASE PRESS THE NUMBER OF YOUR CHOICE."
180 FOR X=1 TO 2
190 PRINT CHR$(13);"WHAT FLAVOR DO YOU WANT"
200 PRINT "FOR SCOOP #";CHR$(X+48);"? ";
210 A$=INKEY$
220 IF A$<"1" OR A$>"7" THEN 210
230 PRINT A$
240 ICE(X)=VAL(A$)
250 NEXT X
260 FOR D=1 TO 300
270 NEXT D
280 CLS(0)
290 FOR RO=1 TO 7
300 FOR CO=CN(RO,1) TO CN(RO,2)
310 PRINT@CO+32*(RO+7),CHR$(151);
320 NEXT CO,RO
330 FOR Z=1 TO 2
340 FOR RO=8-4*Z TO 11-4*Z
350 FOR CO=SCOOP(Z,RO,1) TO SCOOP(Z,RO,2)
360 SOUND RO+CO*10,1
370 PRINT@CO+32*RO,CHR$(143+FLAV(ICE(Z)));
380 NEXT CO,RO,Z
390 IF RND(0)>0.5 OR ICE(2)=1 THEN 450
400 FOR CO=SCOOP(2,0,1) TO SCOOP(2,0,2)
410 FOR RO=0 TO RND(5)
420 SOUND RO*10+100,1
430 PRINT@CO+32*RO,CHR$(207);
440 NEXT RO,CO
```

```
450 FOR D=1 TO 600
460 NEXT D
470 PRINT@480,"PRESS ANY KEY FOR ANOTHER CONE.";
480 A$=INKEY$
490 IF A$="" THEN 480 ELSE 130
1000 DATA 64,VANILLA,16,LEMON,48,RASPBERRY
1010 DATA 96,GRAPE,32,BLUEBERRY,80,MINT,112,ORANGE
2000 DATA 11,19,10,20,10,20,11,19,10,20
2010 DATA 9,21,9,21,10,20,10,20,11,19,12,18
2020 DATA 12,18,13,17,13,17,14,16
```

TRS-80 Model III/*Ice Cream Cone*

```
10 DIM SCOOP(2,16,2),CN(7,2),FLAV(8),FL$(8),ICE(2)
20 FOR Z=1 TO 7
30 READ FLAV(Z),FL$(Z)
40 NEXT Z
50 FOR X=1 TO 2
60 FOR Y=8-4*X TO 13-5*X
70 FOR Z=1 TO 2
80 READ SCOOP(X,Y,Z)
90 NEXT Z,Y,X
100 FOR X=1 TO 7
110 READ CN(X,1),CN(X,2)
120 NEXT X
130 CLS
140 FOR X=1 TO 7
150 PRINT X;"- ";FL$(X)
160 NEXT X
170 PRINT
180 PRINT "PLEASE PRESS THE NUMBER OF YOUR CHOICE."
190 FOR X=1 TO 2
200 PRINT
210 PRINT "WHAT FLAVOR DO YOU WANT FOR SCOOP #";CHR$(X+48);"? ";
220 A$=INKEY$
230 IF A$<"1" OR A$>"7" THEN 220
240 PRINT A$
250 ICE(X)=VAL(A$)
260 NEXT X
270 FOR D=1 TO 100
280 NEXT D
290 CLS
300 FOR RO=1 TO 7
310 FOR CO=CN(RO,1) TO CN(RO,2)
320 PRINT@CO+64*(RO+8),CHR$(157);
330 NEXT CO,RO
340 FOR Z=1 TO 2
350 FOR RO=8-4*Z TO 13-5*Z
360 FOR CO=SCOOP(Z,RO,1) TO SCOOP(Z,RO,2)
370 POKE 15359+CO+64*RO,FLAV(ICE(Z))
380 IF ICE(Z)=5 AND RND(0)<.3 THEN POKE 15359+CO+64*RO,137
390 NEXT CO,RO,Z
400 FOR D=1 TO 400
410 NEXT D
420 PRINT @966,"PLEASE PRESS ANY KEY";
430 PRINT @994,"FOR ANOTHER CONE.";
440 A$=INKEY$
```

```
450 IF A$="" THEN 440 ELSE 130
1000 DATA 191,VANILLA,194,CHOCOLATE CHIP
1010 DATA 243,PISTACHIO,248,MARBLED FUDGE,191
1020 DATA ROCKY ROAD,196,BUBBLE GUM,153,BUTTERSCOTCH
2000 DATA 23,38,20,41,18,43,20,41,22,39,24,37,21,40
2010 DATA 19,42,21,40,22,37,24,35,25,34,26,33,27
2020 DATA 32,28,31,29,30
```

VIC-20/*Ice Cream Cone*

```
10 DIM SCOOP(2,12,2),CN(9,2),FLAV(8),FL$(8),ICE(2)
20 READ SB,CB,S
30 FOR Z=1 TO 7
40 READ FLAV(Z),FL$(Z)
50 NEXT Z
60 FOR X=1 TO 2
70 FOR Y=12-6*X TO 19-7*X
80 FOR Z=1 TO 2
90 READ SCOOP(X,Y,Z)
100 NEXT Z,Y,X
110 FOR X=1 TO 9
120 READ CN(X,1),CN(X,2)
130 NEXT X
140 POKE S+4,9
150 POKE S+5,8
160 PRINT CHR$(147);CHR$(5);
170 FOR X=1 TO 7
180 PRINT X;"- ";FL$(X)
190 NEXT X
200 PRINT CHR$(13);"PLEASE PRESS THE"
210 PRINT "NUMBER OF YOUR CHOICE.";
220 FOR X=1 TO 2
230 PRINT CHR$(13);"WHAT FLAVOR DO YOU"
240 PRINT "WANT FOR SCOOP #";CHR$(X+48);"? ";
250 GET A$
260 IF A$<"1" OR A$>"7" THEN 250
270 PRINT A$
280 ICE(X)=VAL(A$)
290 NEXT X
300 FOR D=1 TO 200
310 NEXT D
320 PRINT CHR$(147);
330 FOR RO=1 TO 9
340 FOR CO=CN(RO,1) TO CN(RO,2)
350 POKE SB+CO+22*(RO+12),86
360 POKE CB+CO+22*(RO+12),7
370 NEXT CO,RO
380 FOR Z=1 TO 2
390 FOR RO=12-6*Z TO 19-7*Z
400 FOR CO=SCOOP(Z,RO,1) TO SCOOP(Z,RO,2)
410 POKE S+2,CO*ICE(Z)+128
420 POKE SB+CO+22*RO,160
430 POKE CB+CO+22*RO,FLAV(ICE(Z))
440 NEXT CO,RO,Z
450 POKE S+2,0
460 IF RND(1)>0.5 THEN 550
470 PRINT CHR$(144);
```

```
480 FOR CO=SCOOP(2,0,1) TO SCOOP(2,0,2)
490 FOR RO=0 TO INT(RND(1)*5)
500 POKE S+3,RO*10+128
510 POKE SB+CO+22*RO,230
520 POKE CB+CO+22*RO,15
530 NEXT RO,CO
540 POKE S+3,0
550 FOR D=1 TO 400
560 NEXT D
570 POKE 198,0
580 POKE 214,21
590 PRINT
600 PRINT CHR$(5);"PLEASE PRESS ANY KEY.";
610 GET A$
620 IF A$="" THEN 610
630 GOTO 160
1000 DATA 7680,38400,36874
2000 DATA 1,VANILLA,7,LEMON,2,RASPBERRY,4,GRAPE
2010 DATA 6,BLUEBERRY,3,MINT,5,PISTACHIO
3000 DATA 6,14,5,15,4,16,4,16,4,16,5,15,6,14,6,14,5,15
3010 DATA 4,16,4,16,4,16,5,15,6,14,6,14,7,13,7,13,8
3020 DATA 12,8,12,9,11,9,11,10,10,4,15,4,15,4,15,5,14
```

SKI TREK

Are you appalled by the idea of standing in lift lines for hours to ski a three-minute run? Does just the thought of 30°-below-zero weather send shivers up and down your spine? Then pack away your skis, poles, and thermal underwear, pull up your favorite chair, pour a cup of hot chocolate, and bring out your hardware. Get ready for a tricky trek down a slick, tree-covered course. Remember, there's no snow-plowing down this one. Ready? Whoooossshhh!

ADAM/*Ski Trek*

```
10 HOME
20 PRINT TAB(9);"THE SKI GAME"
30 FOR t = 1 TO 1500
40 NEXT t
50 HOME
60 PRINT "You are the skier: H"
70 PRINT
80 PRINT "For a high score,"
90 PRINT "ski down the slope"
100 PRINT "without hitting trees."
110 PRINT
120 PRINT "Use the joystick to move left"
130 PRINT "or right."
140 PRINT
150 PRINT "Press <RETURN> to begin."
160 INPUT r$
170 HOME
180 PRINT "  Get ready!"
190 FOR t = 1 TO 250
200 NEXT t
210 l = 12
220 s = 0
230 p = PDL(3)
240 a = INT(RND(1)*16)
250 FOR x = 1 TO a
260 GOSUB 1000
270 PRINT TAB(x);CHR$(33);"           ";CHR$(33)
280 IF l <= x THEN 2000
290 NEXT x
300 FOR y = a TO 1 STEP -1
310 GOSUB 1000
320 PRINT TAB(y);CHR$(33);"           ";CHR$(33)
330 IF l >= y+12 THEN 2000
340 NEXT y
350 GOTO 240
1000 m = PDL(3)
1010 IF m < p THEN l = l-1
1020 IF m > p THEN l = l+1
1030 p = m
1040 HTAB l
1050 PRINT "H";
1060 s = s+1
1070 FOR t = 1 TO 10
1080 NEXT t
```

```
1090 PRINT CHR$(8);CHR$(32)
1100 RETURN
2000 PRINT TAB(l);"*"
2010 PRINT
2020 PRINT " C R A S H!"
2030 PRINT
2040 PRINT "You went ";s;" yards."
2050 IF  s > h THEN h = s
2060 PRINT "The high score is ";h;"."
2070 PRINT
2080 PRINT "Press <RETURN> to play again."
2090 INPUT r$
2100 GOTO 170
```

Apple/*Ski Trek*

```
10 HOME
20 PRINT TAB(12)"THE SKI GAME"
30 FOR T = 1 TO 1500
40 NEXT T
50 HOME
60 PRINT "YOU ARE THE SKIER: H"
70 PRINT
80 PRINT "FOR A HIGH SCORE,"
90 PRINT "SKI DOWN THE SLOPE"
100 PRINT "WITHOUT HITTING THE TREES."
110 PRINT
120 PRINT "PRESSING..."
130 PRINT "  B MOVES YOU LEFT;"
140 PRINT "  N MOVES YOU RIGHT."
150 PRINT
160 PRINT "PRESS (RETURN) TO BEGIN."
170 INPUT R$
180 HOME
190 PRINT " GET READY!"
200 FOR T = 1 TO 2500
210 NEXT T
220 L = 12
230 S = 0
240 A = INT(RND(1)*24)
250 FOR X = 1 TO A
260 GOSUB 1000
270 PRINT TAB(X);CHR$(33);"            ";CHR$(33)
280 IF L <= X THEN 2000
290 NEXT X
300 FOR Y = A TO 1 STEP -1
310 GOSUB 1000
320 PRINT TAB(Y);CHR$(33);"            ";CHR$(33)
330 IF L >= Y+12 THEN 2000
340 NEXT Y
350 GOTO 240
1000 M = PEEK(-16384)
1010 IF M = 194 THEN L = L-1
1020 IF M = 206 THEN L = L+1
1030 HTAB (L)
1040 PRINT "H";
1050 S = S+1
1060 FOR T = 1 TO 20
```

```
1070 NEXT T
1080 PRINT CHR$(8);CHR$(32)
1090 RETURN
2000 PRINT TAB(L)"*"
2010 PRINT
2020 PRINT "   C R A S H !"
2030 PRINT
2040 PRINT
2050 PRINT "YOU WENT "S" YARDS."
2060 IF S > H THEN H = S
2070 PRINT "THE HIGH SCORE IS "H"."
2080 PRINT
2090 PRINT "PRESS (RETURN) TO PLAY AGAIN."
2100 INPUT R$
2110 GOTO 180
```

Atari/*Ski Trek*

```
10 DIM M$(1),R$(1),SP$(40)
20 SP$=" "
30 SP$(40)=SP$
40 SP$(2)=SP$
50 POKE 752,1
60 PRINT CHR$(125)
70 PRINT SP$(1,12);"THE SKI GAME"
80 FOR T=1 TO 500
90 NEXT T
100 PRINT CHR$(125)
110 PRINT "YOU ARE THE SKIER: H"
120 PRINT
130 PRINT "FOR A HIGH SCORE,"
140 PRINT "SKI DOWN THE SLOPE"
150 PRINT "WITHOUT HITTING TREES."
160 PRINT
170 PRINT "PRESSING ..."
180 PRINT "B MOVES YOU LEFT;"
190 PRINT "N MOVES YOU RIGHT."
200 PRINT
210 PRINT "PRESS <RETURN> TO BEGIN."
220 INPUT R$
230 PRINT CHR$(125)
240 POKE 766,1
250 PRINT "  GET READY!"
260 FOR T=1 TO 1000
270 NEXT T
280 L=8
290 S=0
300 A=INT(RND(1)*24)+1
310 FOR X=1 TO A
320 GOSUB 1000
330 PRINT SP$(1,X);CHR$(28);SP$(1,11);CHR$(28)
340 IF L<=X THEN 1110
350 NEXT X
360 FOR Y=A TO 1 STEP -1
370 GOSUB 1000
380 PRINT SP$(1,Y);CHR$(28);SP$(1,11);CHR$(28)
390 IF L>=Y+12 THEN 1110
400 NEXT Y
410 GOTO 300
```

```
1000 M=PEEK(764)
1010 IF M=21 THEN L=L-1
1020 IF M=35 THEN L=L+1
1030 PRINT SP$(1,L);"H";
1040 S=S+1
1050 FOR T=1 TO 20
1060 NEXT T
1070 POKE 766,0
1080 PRINT CHR$(126)
1090 POKE 766,1
1100 RETURN
2000 PRINT SP$(1,L);"*";
2010 PRINT
2020 PRINT " C R A S H!"
2030 PRINT
2040 PRINT "YOU WENT ";S;" YARDS."
2050 IF S>H THEN H=S
2060 PRINT "THE HIGH SCORE IS ";H;"."
2070 PRINT
2080 PRINT "PRESS <RETURN> TO PLAY AGAIN."
2090 INPUT R$
2100 POKE 766,0
2110 GOTO 220
```

Commodore 64/*Ski Trek*

```
10 PRINT CHR$(147)
20 PRINT TAB(12) "THE SKI GAME"
30 FOR T=1 TO 1500
40 NEXT T
50 PRINT CHR$(147)
60 PRINT "YOU ARE THE SKIER:";CHR$(156);"H"
70 PRINT
80 PRINT CHR$(159);"FOR A HIGH SCORE,"
90 PRINT "SKI DOWN THE SLOPE"
100 PRINT "WITHOUT HITTING TREES."
110 PRINT
120 PRINT "PRESSING ..."
130 PRINT "  B MOVES YOU LEFT;"
140 PRINT "  N MOVES YOU RIGHT."
150 PRINT
160 PRINT "PRESS <RETURN> TO BEGIN."
170 INPUT R$
180 PRINT CHR$(147)
190 POKE 650,128
200 PRINT "  GET READY!"
210 FOR T=1 TO 2500
220 NEXT T
230 L=12
240 S=0
250 POKE 53281,1
260 A=INT(RND(1)*24)+1
270 FOR X=1 TO A
280 GOSUB 1000
290 PRINT TAB(X);CHR$(30);CHR$(94);"          ";CHR$(94)
300 IF L<=X THEN 2000
310 NEXT X
320 FOR Y=A TO 1 STEP-1
```

```
330 GOSUB 1000
340 PRINT TAB(Y);CHR$(30);CHR$(94);"            ";CHR$(94)
350 IF L>Y+12 THEN 2000
360 NEXT Y
370 GOTO 260
1000 GET M$
1010 IF M$="B" THEN L=L-1
1020 IF M$="N" THEN L=L+1
1030 PRINT TAB(L);CHR$(156);"H";
1040 S=S+1
1050 FOR T=1 TO 20
1060 NEXT T
1070 PRINT CHR$(20)
1080 RETURN
2000 PRINT TAB(L);CHR$(28);"*"
2010 PRINT
2020 PRINT CHR$(156);" C R A S H!"
2030 PRINT
2040 PRINT "YOU WENT";S;" YARDS"
2050 IF S>H THEN H=S
2060 PRINT "THE HIGH SCORE IS ";H;"."
2070 PRINT "PRESS <RETURN> TO PLAY AGAIN."
2080 INPUT R$
2090 PRINT CHR$(159)
2100 POKE 53281,6
2110 GOTO 180
```

IBM PCs/*Ski Trek*

```
10 RANDOMIZE (0)
20 LOCATE ,,0
30 CLS
40 SCREEN 0,0,0
50 WIDTH 40
60 COLOR 7,0,0
70 KEY OFF
80 PRINT TAB(14);"THE SKI GAME"
90 FOR T=1 TO 1500
100 NEXT T
110 CLS
120 PRINT "YOU ARE THE SKIER: H"
130 PRINT
140 PRINT "FOR A HIGH SCORE,"
150 PRINT "SKI DOWN THE SLOPE"
160 PRINT "WITHOUT HITTING TREES."
170 PRINT
180 PRINT "PRESSING ..."
190 PRINT "  B MOVES YOU LEFT;"
200 PRINT "  N MOVES YOU RIGHT."
210 PRINT
220 PRINT "PRESS <ENTER> TO BEGIN."
230 INPUT R$
240 CLS
250 PRINT "  GET READY!"
260 FOR T=1 TO 2500
270 NEXT T
280 L=12
290 S=0
```

```
300 A=INT(RND*(30))+1
310 FOR X=1 TO A
320 GOSUB 1000
330 PRINT TAB(X);CHR$(24);"            ";CHR$(24)
340 IF L<=X THEN 2030
350 NEXT X
360 FOR Y=A TO 1 STEP -1
370 GOSUB 1000
380 PRINT TAB(Y);CHR$(24);"            ";CHR$(24)
390 IF L>=Y+12 THEN 2030
400 NEXT Y
410 GOTO 300
1000 M$=INKEY$
1010 IF M$="B" THEN L=L-1
1020 IF M$="N" THEN L=L+1
1030 PRINT TAB(L);"H"
1040 S=S+1
1050 FOR T=1 TO 20
1060 NEXT T
1070 RETURN
2000 PRINT TAB(L);"*"
2010 PRINT
2020 PRINT "  CRASH!"
2030 PRINT "YOU WENT ";S;" YARDS."
2040 IF S>H THEN H=S
2050 PRINT "THE HIGH SCORE IS";H;"."
2060 PRINT
2070 PRINT "PRESS <ENTER> TO PLAY AGAIN."
2080 INPUT R$
2090 GOTO 240
```

TI-99/4A w/TI Extended BASIC/*Ski Trek*

```
10 RANDOMIZE
20 CALL CLEAR
30 CALL CHAR(96,"00183C7EFF181818")
40 CALL COLOR(9,4,1)
50 PRINT TAB(8);"THE SKI GAME"
60 FOR T=1 TO 500
70 NEXT T
80 CALL CLEAR
90 PRINT "YOU ARE THE SKIER: H"
100 PRINT
110 PRINT "FOR A HIGH SCORE,"
120 PRINT "SKI DOWN THE SLOPE"
130 PRINT "WITHOUT HITTING TREES."
140 PRINT
150 PRINT "PRESSING..."
160 PRINT "  B MOVES YOU LEFT;"
170 PRINT "  N MOVES YOU RIGHT."
180 PRINT
190 PRINT "PRESS <ENTER> TO BEGIN."
200 INPUT R$
210 CALL CLEAR
220 PRINT "  GET READY!"
230 FOR T=1 TO 800
240 NEXT T
250 L=7
```

```
260 S=0
270 CALL SCREEN(16)
280 PRINT
290 A=INT(RND*13)+1
300 FOR X=1 TO A
310 GOSUB 1000
320 PRINT TAB(X);CHR$(96);"            ";CHR$(96)
330 IF L<=X THEN 2000
340 NEXT X
350 FOR Y=A TO 1 STEP -1
360 GOSUB 1000
370 PRINT TAB(Y);CHR$(96);"            ";CHR$(96)
380 IF L>=Y+12 THEN 2000
390 NEXT Y
400 GOTO 290
1000 CALL KEY(3,M,ST)
1010 IF M=66 THEN L=L-1
1020 IF M=78 THEN L=L+1
1030 CALL HCHAR(23,L,72,1)
1040 S=S+1
1050 FOR T=1 TO 20
1060 NEXT T
1070 CALL HCHAR(23,L,32,1)
1080 RETURN
2000 PRINT TAB(L);"*"
2010 PRINT
2020 PRINT "  C R A S H!"
2030 PRINT "YOU WENT ";S;" YARDS."
2040 IF S>H THEN H=S
2050 PRINT "HIGH SCORE IS ";H
2060 PRINT "PRESS <ENTER> TO PLAY AGAIN."
2070 INPUT R$
2080 GOTO 210
```

Timex Sinclair 1000 w/16K RAM Pack & Timex Sinclair 1500/ *Ski Trek*

```
10 RAND
20 SLOW
30 CLS
40 PRINT TAB 10;"THE SKI GAME"
50 FOR T=1 TO 90
60 NEXT T
70 LET H=0
80 CLS
90 PRINT "YOU ARE THE SKIER: H"
100 PRINT
110 PRINT "FOR A HIGH SCORE,"
120 PRINT "SKI DOWN THE SLOPE"
130 PRINT "WITHOUT HITTING TREES."
140 PRINT
150 PRINT "PRESSING ..."
160 PRINT "  B MOVES YOU LEFT;"
170 PRINT "  N MOVES YOU RIGHT."
180 PRINT
190 PRINT "PRESS <ENTER> TO BEGIN."
200 INPUT R$
210 CLS
```

```
220 PRINT " GET READY."
230 FOR T=1 TO 150
240 NEXT T
250 LET L=12
260 LET S=0
270 LET A=INT (RND*18)
280 FOR X=1 TO A
290 GOSUB 1000
300 IF S>10 THEN SCROLL
310 PRINT TAB X;CHR$ 24;"            ";CHR$ 24
320 IF L<=X THEN GOTO 2000
330 NEXT X
340 FOR Y=A TO 1 STEP -1
350 GOSUB 1000
360 IF S>10 THEN SCROLL
370 PRINT TAB Y;CHR$ 24;"             ";CHR$ 24
380 IF L>=Y+12 THEN GOTO 2000
390 NEXT Y
400 GOTO 270
1000 LET M$=INKEY$
1010 IF M$="B" THEN LET L=L-1
1020 IF M$="N" THEN LET L=L+1
1030 IF S>9 THEN SCROLL
1040 PRINT TAB L;"H"
1050 LET S=S+1
1060 IF S>9 THEN SCROLL
1070 PRINT AT 24-(PEEK 16442),32-(PEEK 16441);" ";
1080 RETURN
2000 SCROLL
2010 PRINT TAB L;"*"
2020 SCROLL
2030 PRINT
2040 SCROLL
2050 PRINT "  CRASH."
2060 SCROLL
2070 PRINT
2080 SCROLL
2090 PRINT "YOU WENT ";S;" YARDS."
2100 IF S>H THEN LET H=S
2110 SCROLL
2120 PRINT "THE HIGH SCORE IS ";H;"."
2130 SCROLL
2140 PRINT
2150 SCROLL
2160 PRINT "PRESS <ENTER> TO PLAY AGAIN."
2170 INPUT R$
2180 GOTO 210
```

TRS-80 Color Computer/*Ski Trek*

```
10 CLS
20 PRINT@41,"THE SKI GAME"
30 FOR T=1 TO 1500
40 NEXT T
50 CLS
60 PRINT@32,"YOU ARE THE SKIER: H"
70 PRINT
80 PRINT "FOR A HIGH SCORE,"
```

```
90 PRINT "SKI DOWN THE SLOPE"
100 PRINT "WITHOUT HITTING TREES."
110 PRINT
120 PRINT "PRESSING..."
130 PRINT "B MOVES YOU LEFT;"
140 PRINT "N MOVES YOU RIGHT."
150 PRINT
160 PRINT "PRESS <ENTER> TO BEGIN."
170 INPUT R$
180 CLS
190 PRINT"  GET READY!"
200 FOR T=1 TO 2500
210 NEXT T
220 L=5
230 S=0
240 A=RND (19)
250 FOR X=1 TO A
260 GOSUB 1000
270 PRINT@(X+480),CHR$(33);"            ";CHR$(33)
280 IF L<=X THEN 2000
290 NEXT X
300 FOR Y=A TO 1 STEP -1
310 GOSUB 1000
320 PRINT@(Y+480),CHR$(33);"            ";CHR$(33)
330 IF L>=Y+12 THEN 2000
340 NEXT Y
350 GOTO 240
1000 M$=INKEY$
1010 FOR D=1 TO 90
1020 NEXT D
1030 IF M$="B" THEN L=L-2
1040 IF M$="N" THEN L=L+2
1050 PRINT@(L+480),"H";
1060 S=S+1
1070 FOR T=1 TO 120
1080 NEXT T
1090 PRINT CHR$(8)
1100 RETURN
2000 PRINT TAB(L);"*"
2010 PRINT
2020 PRINT "  C R A S H!"
2030 PRINT
2040 PRINT "YOU WENT";S;"YARDS."
2050 IF S>H THEN H=S
2060 PRINT "THE HIGH SCORE IS";H;"."
2070 PRINT
2080 PRINT "PRESS <ENTER> TO PLAY AGAIN."
2090 INPUT R$
2100 GOTO 180
```

TRS-80 Model III/*Ski Trek*

```
10 RANDOM
20 CLS
30 PRINT TAB(26) "THE SKI GAME"
40 FOR T=1 TO 1500
50 NEXT T
60 CLS
```

```
70 PRINT "YOU ARE THE SKIER: H"
80 PRINT
90 PRINT "FOR A HIGH SCORE,"
100 PRINT "SKI DOWN THE SLOPE"
110 PRINT "WITHOUT HITTING TREES."
120 PRINT
130 PRINT "PRESSING ..."
140 PRINT "  B MOVES YOU LEFT;"
150 PRINT "  N MOVES YOU RIGHT."
160 PRINT
170 PRINT "PRESS <ENTER> TO BEGIN."
180 INPUT R$
190 CLS
200 PRINT "  GET READY!"
210 FOR T=1 TO 2500
220 NEXT T
230 L=12
240 S=0
250 A=INT(RND(0)*50)
260 FOR X=1 TO A
270 GOSUB 1000
280 PRINT TAB(X) CHR$(124);"            ";CHR$(124)
290 IF L<=X THEN 2000
300 NEXT X
310 FOR Y=A TO 1 STEP -1
320 GOSUB 1000
330 PRINT TAB(Y) CHR$(124);"            ";CHR$(124)
340 IF L>=Y+12 THEN 2000
350 NEXT Y
360 GOTO 250
1000 M$=INKEY$
1010 IF M$="B" THEN L=L-1
1020 IF M$="N" THEN L=L+1
1030 PRINT TAB(L);"H";
1040 S=S+1
1050 FOR T=1 TO 20
1060 NEXT
1070 PRINT CHR$(8)
1080 RETURN
2000 PRINT TAB(L);"*"
2010 PRINT
2020 PRINT "   C R A S H !"
2030 PRINT "YOU WENT"S"YARDS."
2040 IF S>H THEN H=S
2050 PRINT "THE HIGH SCORE IS "H"."
2060 PRINT
2070 PRINT "PRESS <ENTER> TO PLAY AGAIN."
2080 INPUT R$
2090 GOTO 190
```

VIC-20/*Ski Trek*

```
10 PRINT CHR$(147)
20 PRINT TAB(4);"THE SKI GAME"
30 FOR T=1 TO 1500
40 NEXT T
50 PRINT CHR$(147)
60 PRINT "YOU ARE THE SKIER: H"
```

```
70 PRINT
80 PRINT "FOR A HIGH SCORE,"
90 PRINT "SKI DOWN THE SLOPE"
100 PRINT "WITHOUT HITTING TREES."
110 PRINT
120 PRINT "PRESSING ...
130 PRINT "  B MOVES YOU LEFT;"
140 PRINT "  N MOVES YOU RIGHT."
150 PRINT
160 PRINT "PRESS <RETURN> TO BEGIN."
170 INPUT R$
180 PRINT CHR$(147)
190 POKE 36879,25
200 POKE 650,128
210 PRINT "  GET READY!"
220 FOR T=1 TO 2500
230 NEXT T
240 L=10
250 S=0
260 A=INT(RND(1)*9)
270 FOR X=1 TO A
280 GOSUB 1000
290 PRINT TAB(X);CHR$(30);CHR$(94);"           ";CHR$(
94)
300 IF L<=X THEN 2000
310 NEXT X
320 FOR Y=A TO 1 STEP-1
330 GOSUB 1000
340 PRINT TAB(Y);CHR$(30);CHR$(94);"           ";CHR$(
94)
350 IF L>Y+12 THEN 2000
360 NEXT Y
370 GOTO 260
1000 GET M$
1010 IF M$="B" THEN L=L-1
1020 IF M$="N" THEN L=L+1
1030 PRINT TAB(L);CHR$(144);"H";
1040 S=S+1
1050 FOR T=1 TO 40
1060 NEXT T
1070 PRINT CHR$(20)
1080 RETURN
2000 PRINT TAB(L);CHR$(28);"*"
2010 PRINT
2020 PRINT CHR$(156);"  C R A S H!"
2030 PRINT
2040 PRINT "YOU WENT ";S;" YARDS"
2050 IF S>H THEN H=S
2060 PRINT "HIGH SCORE IS";H;"."
2070 PRINT
2080 PRINT "PRESS <RETURN>"
2090 PRINT "TO PLAY AGAIN."
2100 INPUT R$
2110 PRINT CHR$(159)
2120 POKE 53281,6
2130 GOTO 180
```

THE BLACK MASK

Who is that stranger in your living room—the one wearing *The Black Mask*? Look at those beady eyes darting back and forth behind the slits in the mask. Why do they look so suspicious? Exactly who is hiding behind that black mask?

Why, it's your computer, that's who! Now you can dress your computer up in disguise and catch the attention of the whole neighborhood this Halloween! All you have to do is type in *The Black Mask*. RUN it, and place your computer in your front window or in your foyer on the 31st. And look closely: Sometimes the eyes cross!

ADAM/*The Black Mask*

```
9 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
10 p1 = 10
20 p2 = 28
30 v = 1
40 q = 0
50 fl = 0
60 HOME
70 GR
79 REM --PAINT BACKGROUND ORANGE--
80 COLOR= 9
90 FOR x = 0 TO 39
100 HLIN 0,39 AT x
110 NEXT x
119 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
120 COLOR= 0
130 FOR x = 10 TO 29 STEP 19
140 p = 7
150 FOR y = 8 TO 24
160 HLIN x-p,x+p AT y
170 IF y < 10 THEN p = p+1
180 IF y > 18 THEN p = p-1
190 NEXT y,x
199 REM --DRAW WHITES OF EYES--
200 COLOR= 13
210 GOSUB 1000
219 REM  --PRINT PUPILS--
220 COLOR= 6
230 PLOT p1,14
240 PLOT p2,14
249 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
250 IF p1 = 10 OR (p1 = 13 AND p2 = 27) THEN q = 1000
260 FOR d = 1 TO RND(1)*1500+q
270 NEXT d
280 q = 0
289 REM --ERASE PUPILS--
290 COLOR= 13
300 PLOT p1,14
310 PLOT p2,14
319 REM --BLINK SOMETIMES--
320 IF p1 <> 10 OR RND(0) < 0.7 THEN 380
330 COLOR= 9
340 GOSUB 1000
```

```
350 FOR d = 1 TO 450
360 NEXT d
370 GOTO 200
379 REM  --COMPUTE NEW POSITIONS (p1,p2) FOR PUPILS--
380 IF p1 = 7 or p1 = 13 THEN v = -v
390 IF fl = 1 AND p1 = 10 THEN fl = 0:GOTO 410
400 IF p1 = 10 AND RND(0) < 0.2 THEN fl = 1:v = 1
410 p1 = p1+v
420 IF fl = 0 THEN p2 = p2+v
430 IF fl = 1 THEN p2 = p2-v
440 GOTO 220
999 REM --FILL EYES WITH CURRENT COLOR--
1000 HLIN 7,13 AT 14
1010 HLIN 25,31 AT 14
1020 RETURN
```

Apple/*The Black Mask*

```
9 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
10 P1 = 10
20 P2 = 28
30 V = 1
40 Q = 0
50 FL = 0
60 HOME
70 GR
79 REM --CHANGE TEXT WINDOW TO GRAPHICS--
80 POKE -16302,0
89 REM --PAINT BACKGROUND ORANGE--
90 COLOR= 9
100 FOR X = 0 TO 47
110 HLIN 0,39 AT X
120 NEXT X
129 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
130 COLOR= 0
140 FOR X = 10 TO 29 STEP 19
150 P = 7
160 FOR Y = 8 TO 24
170 HLIN X-P,X+P AT Y
180 IF Y < 10 THEN P = P+1
190 IF Y > 18 THEN P = P-1
200 NEXT Y,X
209 REM --DRAW WHITES OF EYES--
210 COLOR= 13
220 GOSUB 1000
229 REM --PRINT PUPILS--
230 COLOR= 6
240 PLOT P1,14
250 PLOT P2,14
259 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
260 IF P1 = 10 OR (P1 = 13 AND P2 = 27) THEN Q = 1000
270 FOR D = 1 TO RND(1)*1000+Q
280 NEXT D
290 Q = 0
299 REM --ERASE PUPILS--
300 COLOR= 13
310 PLOT P1,14
320 PLOT P2,14
```

```
329 REM --BLINK SOMETIMES--
330 IF P1 <> 10 OR RND(1) < 0.7 THEN 390
340 COLOR= 9
350 GOSUB 1000
360 FOR D = 1 TO 450
370 NEXT D
380 GOTO 210
389 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
390 IF P1 = 7 OR P1 = 13 THEN V = -V
400 IF FL = 1 AND P1 = 10 THEN FL = 0:GOTO 420
410 IF P1 = 10 AND RND(1) < 0.2 THEN FL = 1:V = 1
420 P1 = P1+V
430 IF FL = 0 THEN P2 = P2+V
440 IF FL = 1 THEN P2 = P2-V
450 GOTO 230
999 REM --FILL EYES WITH CURRENT COLOR--
1000 HLIN 7,13 AT 14
1010 HLIN 25,31 AT 14
1020 RETURN
```

Atari/*The Black Mask*

```
9 REM --INITIALIZE VARIABLES--
10 P1=10
20 P2=28
30 V=1
40 Q=0
50 FL=0
59 REM --SET GRAPHICS MODE AND COLOR REGISTERS--
60 GRAPHICS 3+16
70 SETCOLOR 0,0,0
80 SETCOLOR 1,5,7
90 SETCOLOR 2,5,8
100 SETCOLOR 4,0,10
109 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
110 COLOR 1
120 FOR X=10 TO 29 STEP 19
130 P=8
140 FOR Y=4 TO 20
150 PLOT X-P,Y
160 DRAWTO X+P,Y
170 IF Y<6 THEN P=P+1
180 IF Y>14 THEN P=P-1
190 NEXT Y
200 NEXT X
209 REM --DRAW WHITES OF EYES--
210 COLOR 4
220 GOSUB 1000
229 REM --PLOT PUPILS--
230 COLOR 2
240 PLOT P1,10
250 PLOT P2,10
259 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
260 IF P1=10 OR (P1=13 AND P2=25) THEN Q=500
270 FOR D=1 TO RND(0)*100+Q
280 NEXT D
290 Q=0
299 REM --ERASE PUPILS--
```

```
300 COLOR 4
310 PLOT P1,10
320 PLOT P2,10
329 REM --BLINK SOMETIMES--
330 IF P1<>10 OR RND(0)<0.7 THEN 390
340 COLOR 3
350 GOSUB 1000
360 FOR D=1 TO 300
370 NEXT D
380 GOTO 210
389 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
390 IF P1=7 OR P1=13 THEN V=-V
400 IF FL=1 AND P1=10 THEN FL=0:GOTO 420
410 IF P1=10 AND RND(0)<0.2 THEN FL=1:V=1
420 P1=P1+V
430 IF FL=0 THEN P2=P2+V
440 IF FL=1 THEN P2=P2-V
450 GOTO 230
999 REM --FILL EYES WITH CURRENT COLOR--
1000 PLOT 7,10
1010 DRAWTO 13,10
1020 PLOT 25,10
1030 DRAWTO 31,10
1040 RETURN
```

Commodore 64/*The Black Mask*

```
9 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
10 CB=55296
20 SB=1024
30 P1=10
40 P2=28
50 V=1
60 Q=0
70 FL=0
80 PRINT CHR$(147)
89 REM --SET BACKGROUND AND BORDER COLOR TO YELLOW--
90 POKE 53280,7
100 POKE 53281,7
109 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
110 FOR X=10 TO 29 STEP 19
120 P=7
130 FOR Y=4 TO 20
140 FOR Z=X-P TO X+P
150 POKE SB+Z+40*Y,160
160 POKE CB+Z+40*Y,0
170 NEXT Z
180 IF Y<6 THEN P=P+1
190 IF Y>14 THEN P=P-1
200 NEXT Y,X
209 REM --DRAW WHITES OF EYES--
210 KO=7
220 GOSUB 1000
229 REM --PRINT PUPILS--
230 POKE SB+P1+400,81
240 POKE CB+P1+400,6
250 POKE SB+P2+400,81
260 POKE CB+P2+400,6
```

```
269 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
270 IF P1=10 OR (P1=13 AND P2=27) THEN Q=1000
280 FOR D=1 TO RND(1)*1500+Q
290 NEXT D
300 Q=0
309 REM --ERASE PUPILS--
310 POKE SB+P1+400,160
320 POKE CB+P1+400,7
330 POKE SB+P2+400,160
340 POKE CB+P2+400,7
349 REM --BLINK SOMETIMES--
350 IF P1<>10 OR RND(0)<0.7 THEN 410
360 K0=6
370 GOSUB 1000
380 FOR D=1 TO 450
390 NEXT D
400 GOTO 210
409 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
410 IF P1=7 OR P1=13 THEN V=-V
420 IF FL=1 AND P1=10 THEN FL=0:GOTO 440
430 IF RND(0)<0.2 AND P1=10 THEN FL=1:V=1
440 P1=P1+V
450 IF FL=0 THEN P2=P2+V
460 IF FL=1 THEN P2=P2-V
470 GOTO 230
999 REM --FILL EYES WITH COLOR K0--
1000 FOR Z=7 TO 13
1010 POKE CB+Z+400,K0
1020 POKE CB+Z+400+18,K0
1030 NEXT Z
1040 RETURN
```

IBM PC w/Color Graphics Adapter & IBM PC*jr*/*The Black Mask*

```
10 RANDOMIZE
20 WIDTH 40
30 KEY OFF
40 SCREEN 0,1
50 COLOR ,7,7
59 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
60 P1=11
70 P2=26
80 V=1
90 Q=0
100 FL=0
110 CLS
119 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
120 COLOR 0
130 FOR X=11 TO 26 STEP 15
140 P=5
150 FOR Y=5 TO 19
160 FOR Z=X-P TO X+P
170 LOCATE Y,Z:PRINT CHR$(219)
180 NEXT Z
190 IF Y<7 THEN P=P+1
200 IF Y>15 THEN P=P-1
210 NEXT Y,X
219 REM --DRAW WHITES OF EYES--
```

```
220 COLOR 7
230 GOSUB 1000
239 REM --PRINT PUPILS--
240 COLOR 0
250 LOCATE 10,P1:PRINT "O"
260 LOCATE 10,P2:PRINT "O"
269 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
270 IF P1=11 OR (P1=15 AND P2=23) THEN Q=1000
280 FOR D=1 TO RND(1)*800+Q
290 NEXT D
300 Q=0
309 REM --ERASE PUPILS--
310 COLOR 7
320 LOCATE 10,P1:PRINT CHR$(219)
330 LOCATE 10,P2:PRINT CHR$(219)
339 REM --BLINK SOMETIMES--
340 IF P1<>11 OR RND(1)<.5 THEN 400
350 COLOR 12
360 GOSUB 1000
370 FOR D=1 TO 600
380 NEXT D
390 GOTO 220
399 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
400 IF P1=8 OR P1=14 THEN V=-V
410 IF FL=1 AND P1=11 THEN FL=0:GOTO 430
420 IF P1=11 AND RND(1)<.2 THEN FL=1:V=1
430 P1=P1+V
440 IF FL=0 THEN P2=P2+V
450 IF FL=1 THEN P2=P2-V
460 GOTO 240
999 REM --FILL EYES WITH CURRENT COLOR-
1000 LOCATE 10,8:PRINT STRING$(7,219)
1010 LOCATE 10,23:PRINT STRING$(7,219)
1020 RETURN
```

TI-99/4A/*The Black Mask*

```
10 RANDOMIZE
19 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
20 P1=11
30 P2=22
40 V=1
50 Q=0
60 FL=0
70 CALL CLEAR
80 CALL SCREEN(12)
89 REM --NOTE: MAKE SURE ALPHA LOCK IS DOWN--
90 A$="FFFFFFFFFFFFFFFF"
100 C$="3C7EFFFFFFFF7E3C"
110 CALL CHAR(128,A$)
120 CALL CHAR(136,A$)
130 CALL CHAR(144,C$)
140 CALL CHAR(152,A$)
150 CALL COLOR(13,2,2)
160 CALL COLOR(14,10,1)
170 CALL COLOR(15,5,1)
180 CALL COLOR(16,12,12)
189 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
```

```
190 FOR X=11 TO 22 STEP 11
200 P=3
210 FOR Y=4 TO 19
220 FOR Z=X-P TO X+P
230 CALL HCHAR(Y,Z,128)
240 NEXT Z
250 IF Y>=6 THEN 270
260 P=P+1
270 IF Y<=15 THEN 290
280 P=P-1
290 NEXT Y
300 NEXT X
309 REM --DRAW WHITES OF EYES--
310 KO=152
320 GOSUB 1000
329 REM --PRINT PUPILS--
330 CALL HCHAR(10,P1,144)
340 CALL HCHAR(10,P2,144)
349 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
350 IF (P1<>11)*((P1<>14)+(P2<>19))THEN 370
360 Q=1000
370 FOR D=1 TO RND*500+Q
380 NEXT D
390 Q=0
399 REM --ERASE PUPILS--
400 CALL HCHAR(10,P1,152)
410 CALL HCHAR(10,P2,152)
419 REM --BLINK SOMETIMES--
420 IF (P1<>11)+(RND<0.7)THEN 480
430 KO=136
440 GOSUB 1000
450 FOR D=1 TO 300
460 NEXT D
470 GOTO 310
479 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
480 IF (P1<>8)*(P1<>14)THEN 500
490 V=-V
500 IF (FL<>1)+(P1<>11)THEN 530
510 FL=0
520 GOTO 560
530 IF (P1<>11)+(RND>0.2)THEN 560
540 FL=1
550 V=1
560 P1=P1+V
570 IF FL=1 THEN 600
580 P2=P2+V
590 GOTO 330
600 P2=P2-V
610 GOTO 330
999 REM --FILL EYES WITH CHARACTER KO--
1000 CALL HCHAR(10,8,KO,7)
1010 CALL HCHAR(10,19,KO,7)
1020 RETURN
```

Timex Sinclair 1000 w/16K RAM Pack & Timex Sinclair 1500/*The Black Mask*

```
10 FAST
20 RAND
30 DIM P$(2,7)
39 REM --INITIALIZE VARIABLES--
40 FOR X=1 TO 7
50 LET P$(1,X)=CHR$ 0
60 LET P$(2,X)=CHR$ 136
70 NEXT X
80 LET P1=9
90 LET P2=22
100 LET V=1
110 LET Q=0
120 LET FL=0
129 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
130 FOR X=9 TO 22 STEP 13
140 LET P=4
150 FOR Y=2 TO 17
160 FOR Z=X-P TO X+P
170 PRINT AT Y,Z;CHR$ 128
180 NEXT Z
190 IF Y<4 THEN LET P=P+1
200 IF Y>12 THEN LET P=P-1
210 NEXT Y
220 NEXT X
230 SLOW
239 REM --DRAW WHITES OF EYES--
240 LET K0=1
250 GOSUB 1000
259 REM --PRINT PUPILS--
260 PRINT AT 9,P1;CHR$ 52;AT 9,P2;CHR$ 52
269 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
270 IF P1=10 OR (P1=12 AND P2=25) THEN LET Q=5
280 FOR D=1 TO RND*20+Q
290 NEXT D
300 LET Q=0
309 REM --ERASE PUPILS--
310 PRINT AT 9,P1;CHR$ 0;AT 9,P2;CHR$ 0
319 REM --BLINK SOMETIMES--
320 IF P1<>9 OR RND<0.7 THEN GOTO 380
330 LET K0=2
340 GOSUB 1000
350 FOR D=1 TO 5
360 NEXT D
370 GOTO 240
379 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
380 IF P1=6 OR P1=12 THEN LET V=-V
390 IF FL=0 OR P1<>9 THEN GOTO 420
400 LET FL=0
410 GOTO 450
420 IF P1<>9 OR RND>0.2 THEN GOTO 450
430 LET FL=1
440 LET V=1
450 LET P1=P1+V
460 IF FL=0 THEN LET P2=P2+V
470 IF FL=1 THEN LET P2=P2-V
480 GOTO 260
```

```
999 REM --FILL EYES WITH P$(KO)--
1000 PRINT AT 9,6;P$(KO);AT 9,19;P$(KO)
1010 RETURN
```

TRS-80 Color Computer/*The Black Mask*

```
9 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
10 P1=8
20 P2=23
30 V=1
40 Q=0
50 FL=0
60 CLS(2)
69 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
70 FOR X=9 TO 22 STEP 13
80 P=5
90 FOR Y=2 TO 13
100 FOR Z=X-P TO X+P
110 PRINT@Z+32*Y,CHR$(128);
120 NEXT Z
130 IF Y<3 THEN P=P+1
140 IF Y>8 THEN P=P-1
150 NEXT Y,X
159 REM --DRAW WHITES OF EYES--
160 KO=159
170 GOSUB 1000
179 REM --PRINT PUPILS--
180 PRINT@P1+224,CHR$(175);
190 PRINT@P2+224,CHR$(175);
199 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
200 IF P1=8 OR (P1=1 AND P2=19) THEN Q=1000
210 FOR D=1 TO RND(500)+Q
220 NEXT D
230 Q=0
239 REM --ERASE PUPILS--
240 PRINT@P1+224,CHR$(159);
250 PRINT@P2+224,CHR$(159);
259 REM --BLINK SOMETIMES--
260 IF P1<>8 OR RND(0)<0.7 THEN 320
270 KO=191
280 GOSUB 1000
290 FOR D=1 TO 600
300 NEXT D
310 GOTO 160
319 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
320 IF P1=5 OR P1=11 THEN V=-V
330 IF FL=1 AND P1=8 THEN FL=0:GOTO 350
340 IF P1=8 AND RND(0)<0.2 THEN FL=1:V=1
350 P1=P1+V
360 IF FL=0 THEN P2=P2+V
370 IF FL=1 THEN P2=P2-V
380 GOTO 180
999 REM --FILL EYES WITH CHARACTER KO--
1000 PRINT@229,STRING$(7,KO);
1010 PRINT@244,STRING$(7,KO);
1020 RETURN
```

TRS-80 Model III/*The Black Mask*

```
9 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
10 P1=17
20 P2=45
30 V=1
40 Q=0
50 FL=0
60 CLS
69 REM --PAINT BACKGROUND WHITE--
70 FOR X=0 TO 63
80 FOR Y=0 TO 14
90 PRINT@X+64*Y,CHR$(191);
100 NEXT Y,X
110 FOR X=19 TO 44 STEP 25
120 P=8
130 FOR Y=1 TO 10
140 FOR Z=X-P TO X+P
150 PRINT@Z+64*Y,CHR$(128);
160 NEXT Z
170 IF Y<3 THEN P=P+2
180 IF Y>7 THEN P=P-2
190 NEXT Y,X
199 REM --DRAW WHITES OF EYES--
200 K0=191
210 GOSUB 1000
219 REM --PRINT PUPILS--
220 PRINT@P1+320,CHR$(131);
230 PRINT@P2+320,CHR$(131);
239 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
240 IF P1=17 OR (P1=20 AND P2=41) THEN Q=750
250 FOR D=1 TO RND(300)+Q
260 NEXT D
270 Q=0
279 REM --ERASE PUPILS--
280 PRINT@P1+320,CHR$(191);
290 PRINT@P2+320,CHR$(191);
299 REM --BLINK SOMETIMES--
300 IF P1<>17 OR RND(10)<5 THEN 360
310 K0=179
320 GOSUB 1000
330 FOR D=1 TO 450
340 NEXT D
350 GOTO 200
359 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
360 IF P1=13 OR P1=21 THEN V=-V
370 IF PL=1 AND P1=17 THEN FL=0:GOTO 390
380 IF P1=17 AND RND(10)<4 THEN FL=1:V=1
390 P1=P1+V
400 IF FL=0 THEN P2=P2+V
410 IF FL=1 THEN P2=P2-V
420 GOTO 220
999 REM --FILL EYES WITH CHARACTER K0--
1000 PRINT@333,STRING$(9,K0);
1010 PRINT@361,STRING$(9,K0);
1020 RETURN
```

VIC-20/*The Black Mask*

```
9 REM --INITIALIZE VARIABLES AND CLEAR SCREEN--
10 CB=38400
20 SB=7680
30 P1=5
40 P2=16
50 V=1
60 Q=0
70 FL=0
80 PRINT CHR$(147)
89 REM --SET BACKGROUND COLOR TO ORANGE--
90 POKE 36879,127
99 REM --DRAW LEFT AND RIGHT SIDES OF MASK--
100 FOR X=5 TO 16 STEP 11
110 P=1
120 FOR Y=3 TO 17
130 FOR Z=X-P TO X+P
140 POKE SB+Z+22*Y,160
150 POKE CB+Z+22*Y,0
160 NEXT Z
170 IF Y<7 THEN P=P+1
180 IF Y>13 THEN P=P-1
190 NEXT Y,X
199 REM --DRAW WHITES OF EYES--
200 KO=7
210 GOSUB 1000
219 REM --PRINT PUPILS--
220 POKE SB+P1+220,81
230 POKE CB+P1+220,6
240 POKE SB+P2+220,81
250 POKE CB+P2+220,6
259 REM --PAUSE (LONG IF PUPILS CENTERED OR CROSSED)--
260 IF P1=5 OR (P1=7 AND P2=14) THEN Q=1000
270 FOR D=1 TO RND(1)*1500+Q
280 NEXT D
290 Q=0
299 REM --ERASE PUPILS--
300 POKE SB+P1+220,160
310 POKE CB+P1+220,7
320 POKE SB+P2+220,160
330 POKE CB+P2+220,7
339 REM --BLINK SOMETIMES--
340 IF P1<>5 OR RND(0)<0.7 THEN 400
350 KO=4
360 GOSUB 1000
370 FOR D=1 TO 450
380 NEXT D
390 GOTO 200
399 REM --COMPUTE NEW POSITIONS (P1,P2) FOR PUPILS--
400 IF P1=3 OR P1=7 THEN V=-V
410 IF FL=1 AND P1=5 THEN FL=0:GOTO 430
420 IF RND(0)<0.2 AND P1=5 THEN FL=1:V=1
430 P1=P1+V
440 IF FL=0 THEN P2=P2+V
450 IF FL=1 THEN P2=P2-V
460 GOTO 220
999 REM --FILL EYES WITH COLOR KO--
```

```
1000 FOR Z=3 TO 7
1010 POKE CB+Z+220,K0
1020 POKE CB+Z+11+220,K0
1030 NEXT Z
1040 RETURN
```

JACK-O'-LANTERN

Throw out your Swiss army knife; this Halloween you can carve a pumpkin with a cursor! That's right. Just type this program into your computer, RUN it, and your computer will create a *Jack-o'-Lantern* right on your screen! Put the monitor in your front window and watch your pumpkin be the talk of the neighborhood on Halloween night!

ADAM & Apple/*Jack-o'-Lantern*

```
10 GR:COLOR= 9
20 HLIN 11,16 AT 2
30 FOR Z = 2 TO 39
40 READ X:READ Y
50 HLIN X,Y AT Z
60 NEXT Z
70 COLOR= 13
80 PLOT 13,9:PLOT 25,9
90 FOR Z = 10 TO 13
100 READ X:READ Y
110 HLIN X,Y AT Z
120 READ X:READ Y
130 HLIN X,Y AT Z
140 NEXT Z
150 PLOT 19,18
160 FOR Z = 19 TO 22
170 READ X:READ Y
180 HLIN X,Y AT Z
190 NEXT Z
200 FOR Z = 27 TO 30
210 READ X:READ Y
220 HLIN X,Y AT Z
230 NEXT Z
240 COLOR= 8
250 FOR Z = 0 TO 4
260 HLIN 18,20 AT Z
270 NEXT Z
280 HOME:GOTO 280
1000 DATA 22,27,9,29,8,31,7,32,6,33,5,34,4,34,4,35,3
1010 DATA 36,2,37,2,37,1,38,1,38,0,39,0,39,0,39,0,39
1020 DATA 0,39,0,39,0,39,0,39,1,38,1,38,2,37,2,37,2
1030 DATA 37,3,36,3,36,4,35,5,35,6,34,7,34,8,33,9,32
1040 DATA 11,31,12,29,14,27,15,24,12,14,24,26,11,15
1050 DATA 23,27,10,16,22,28,9,17,21,29,18,20,17,21,16
1060 DATA 22,15,23,12,26,13,25,14,24,15,23
```

Atari/*Jack-o'-Lantern*

```
10 PRINT CHR$(125)
20 GRAPHICS 3+16
30 COLOR 1
40 FOR R=1 TO 24
50 READ X,Y,X1,Y1
60 PLOT X,Y
70 DRAWTO X1,Y1
80 NEXT R
90 COLOR 2
```

```
100 FOR R=1 TO 14
110 READ X,Y
120 PLOT X,Y
130 NEXT R
140 FOR R=1 TO 13
150 READ X,Y,X1,Y1
160 PLOT X,Y
170 DRAWTO X1,Y1
180 NEXT R
190 GOTO 190
1000 DATA 11,1,16,1,23,1,28,1,9,2,30,2,7,3,32,3,5,4,34
1010 DATA 4,4,5,35,5,3,6,36,6,2,7,37,7,38,8,1,8,1,9,38
1020 DATA 9,39,10,0,10,0,11,39,11,39,12,0,12,0,13,39
1030 DATA 13,39,14,0,14,1,15,38,15,38,16,1,16,2,17,37
1040 DATA 17,36,18,3,18,4,19,35,19,34,20,5,20,7,21,32
1050 DATA 21,30,22,9,22,11,23,28,23,19,0,20,0,19,1,20
1060 DATA 1,19,2,20,2,13,5,26,5,14,15,24,15,14,16,15
1070 DATA 16,24,16,25,16,12,6,14,6,25,6,27,6,11,7,15
1080 DATA 7,24,7,28,7,10,8,16,8,23,8,29,8,19,11,20
1090 DATA 11,18,12,21,12,17,13,22,13,14,17,25,17,15
1100 DATA 18,24,18,16,19,23,19,17,20,22,20
```

Commodore 64/*Jack-o'-Lantern*

```
10 PRINT CHR$(147)
20 POKE 53281,0:POKE 53280,0
30 FOR Z=1 TO 24
40 READ X:READ Y
50 FOR P=X TO Y
60 POKE P,160
70 POKE P+54272,8
80 NEXT P
90 NEXT Z
100 FOR Z=1 TO 15
110 READ X:READ Y
120 FOR P=X TO Y
130 POKE P,160
140 POKE P+54272,7
150 NEXT P
160 NEXT Z
170 FOR Z=1 TO 2
180 READ X:READ Y
190 FOR P=X TO Y
200 POKE P,160
210 POKE P+54272,9
220 NEXT P
230 NEXT Z
240 GOTO 240
1000 DATA 1078,1090,1114,1134,1151,1176,1189,1218
1010 DATA 1228,1259,1267,1300,1306,1341,1345,1382
1020 DATA 1385,1422,1424,1463,1464,1503,1504,1543
1030 DATA 1544,1583,1584,1623,1624,1663,1665,1702
1040 DATA 1706,1742,1747,1781,1788,1820,1829,1859
1050 DATA 1871,1898,1912,1936,1954,1974,1996,2012
1060 DATA 1237,1237,1250,1250,1276,1278,1289,1291
1070 DATA 1315,1319,1328,1332,1354,1360,1367,1373
1080 DATA 1483,1484,1522,1525,1561,1566,1678,1689
1090 DATA 1719,1728,1760,1767,1801,1806,1043,1044
1100 DATA 1083,1084
```

TI-99/4A/*Jack-o'-Lantern*

```
10 CALL CLEAR
20 CALL SCREEN(2)
30 A$="FFFFFFFFFFFFFFFF"
40 CALL CHAR(96,A$)
50 CALL CHAR(104,A$)
60 CALL CHAR(112,A$)
70 CALL COLOR(9,10,1)
80 FOR R=1 TO 23
90 READ X,X1,Y
100 FOR P=X TO X1
110 CALL HCHAR(Y,P,96)
120 NEXT P
130 NEXT R
140 CALL COLOR(10,7,1)
150 FOR R=1 TO 6
160 READ X,Y
170 CALL HCHAR(Y,X,104)
180 NEXT R
190 CALL COLOR(11,12,1)
200 X=11
210 Y=7
220 X1=X
230 FOR P=1 TO 4
240 FOR O=X TO X1
250 CALL HCHAR(Y,O,112)
260 CALL HCHAR(Y,O+11,112)
270 CALL HCHAR(Y+5,O+5,112)
280 NEXT O
290 Y=Y+1
300 X=X-1
310 X1=X1+1
320 NEXT P
330 X=12
340 Y=18
350 X1=21
360 FOR P=1 TO 3
370 FOR O=X TO X1
380 CALL HCHAR(Y,O,112)
390 NEXT O
400 Y=Y+1
410 X=X+1
420 X1=X1-1
430 NEXT P
440 GOTO 440
1000 DATA 11,23,2,9,25,3,7,27,4,6,28,5,4,29,6,3,30
1010 DATA 7,2,31,8,1,32,9,1,32,10,1,32,11,1,32,12
1020 DATA 1,32,13,1,32,14,2,31,15,2,31,16,3,30,17
1030 DATA 3,30,18,4,29,19,5,28,20,6,26,21,7,25,22
1040 DATA 9,23,23,12,20,24,16,1,17,1,16,2,17,2,16
1050 DATA 3,17,3
```

Timex Sinclair 1000 & 1500/*Jack-o'-Lantern*

```
10 CLS
20 LET E=21
30 FOR A=2.5 TO 90 STEP 2.5
40 LET R=A/180*PI
```

```
50 LET S=SIN R*25
60 LET C=INT (COS R*21)
70 IF C=E THEN GOTO 150
80 LET Y=20+C
90 LET Z=21-C
100 FOR X=(30-S) TO (30+S)
110 PLOT X,Y
120 PLOT X,Z
130 NEXT X
140 LET E=C
150 NEXT A
160 FOR Y=1 TO 5
170 FOR X=Y TO (10-Y)
180 UNPLOT (X+14),(Y+28)
190 UNPLOT (X+35),(Y+28)
200 UNPLOT (X+25),(Y+20)
210 NEXT X
220 NEXT Y
230 FOR Y=11 TO 14
240 FOR X=(34-Y) TO (26+Y)
250 IF (X>27) AND (X<32) THEN PLOT X,(Y+29)
260 UNPLOT X,Y
270 NEXT X
280 NEXT Y
290 SLOW
300 PRINT AT 0,0," "
310 GOTO 310
```

TRS-80 Color Computer/*Jack-o'-Lantern*

```
10 CLS(0)
20 FOR Y=2 TO 29
30 P=1
40 IF Y>6 AND Y<12 THEN P=3
50 IF Y>13 AND Y<26 THEN P=2
60 FOR L=1 TO P
70 READ B,E
80 FOR X=B TO E
90 SET (X,Y,8)
100 NEXT X
110 NEXT L
120 NEXT Y
130 FOR Y=0 TO 3
140 FOR X=30 TO 33
150 SET (X,Y,1)
160 NEXT X
170 NEXT Y
180 GOTO 180
1000 DATA 20,43,16,47,13,50,10,53,9,54,8,19
1010 DATA 23,40,44,55,7,18,24,39,45,56,6,17
1020 DATA 25,38,46,57,6,16,26,37,47,57,6,15,27
1030 DATA 36,48,57,4,59,4,59,4,31,34,59,4,30
1040 DATA 35,59,4,29,36,59,4,28,37,59,4,30,31
1050 DATA 59,6,30,31,57,6,30,31,57,6,19,44,57
1060 DATA 7,20,43,56,8,21,42,55,9,22,41,54
1070 DATA 10,23,40,53,10,53,11,52,13,50,17,46
```

VIC-20/*Jack-o'-Lantern*

```
10 PRINT CHR$(147)
20 POKE 36879,136
30 FOR Z=1 TO 25
40 READ X:READ Y
50 FOR P=X TO Y
60 POKE P,160
70 POKE P+30720,0
80 NEXT P
90 NEXT Z
100 FOR Z=1 TO 12
110 READ X,Y
120 FOR P=X TO Y
130 POKE P,160
140 POKE P+30720,7
150 NEXT P
160 NEXT Z
170 GOTO 170
1000 DATA 7680,7689,7692,7701,7702,7707,7718,7723
1010 DATA 7724,7727,7742,7745,7746,7748,7765,7767
1020 DATA 7768,7770,7788,7789,7790,7791,7811,7811
1030 DATA 7812,7812,7833,7833,7834,7834,8076,8076
1040 DATA 8097,8097,8098,8098,8119,8119,8120,8121
1050 DATA 8140,8141,8142,8144,8161,8163,8164,8168
1060 DATA 8181,8185,7797,7797,7804,7804,7818,7820
1070 DATA 7825,7827,7839,7843,7846,7850,7910,7911
1080 DATA 7931,7934,7952,7957,8039,8046,8062,8067
1090 DATA 8085,8088
```

CORNUCOPIA

While you're decorating the house this Thanksgiving in preparation for the relatives' arrival, don't overlook your computer! After you've hung the dried corn ears on the front door and created a table centerpiece of pumpkins and gourds, RUN this program and watch that age-old symbol of abundance, the cornucopia, appear on your screen, overflowing with autumn fruits and vegetables!

ADAM/*Cornucopia*

```
9 REM --CLEAR SCREEN AND SET FOR GRAPHICS--
10 HOME
20 GR
29 REM --DRAW LARGE, REGULAR AREAS OF PICTURE--
30 FOR x = 1 TO 10
40 READ ko,f,t
50 COLOR= ko
60 FOR ro = f TO t
70 READ a,b
80 HLIN a,b AT ro
90 NEXT ro,x
99 REM --DRAW DETAILED AND IRREGULAR PARTS--
100 FOR x = 1 TO 3
110 READ ko,t
120 COLOR= ko
130 FOR y = 1 TO t
140 READ co,ro
150 PLOT co,ro
160 NEXT y,x
170 GOTO 170
1000 DATA 13,1,33,3,3,3,4,3,5,3,6,3,7,3,8,3,9
1010 DATA 3,10,4,11,4,12,4,14,4,17,4,26,5,27
1020 DATA 5,28,5,29,6,30,6,31,7,31,7,32,7,32
1030 DATA 8,32,8,32,9,32,9,32,10,31,10,31,11,31
1040 DATA 12,17,13,17,15,17,16,19,18,26
1050 DATA 1,14,34,21,23,20,22,19,22,18,21
1060 DATA 17,19,17,18,16,17,16,17,16,23
1070 DATA 16,23,16,24,16,24,17,25,17,26
1080 DATA 17,26,18,26,18,26,18,25,20,25
1090 DATA 21,24,22,23
1100 DATA 12,14,22,24,26,23,27,23,28,22,29
1110 DATA 22,28,23,27,24,28,24,27,24,25
1120 DATA 3,20,35,31,31,28,31,26,31,24,31
1130 DATA 25,31,25,31,26,30,27,30,27,30
1140 DATA 27,31,27,32,26,31,26,32,27,31,28,30
1150 DATA 29,29,11,18,23,20,21,19,22,18,23,18,23,19
1160 DATA 22,20,21,3,24,26,18,19,17,20,18,19
1170 DATA 13,16,19,25,26,24,27,24,27,25,26
1180 DATA 11,18,20,29,30,28,30,29,30
1190 DATA 9,22,25,27,28,26,29,26,29,27,28
1200 DATA 12,26,31,22,24,21,25,21,25,21,25,22
1210 DATA 24,23,23,2,21,27,27,29,28,27,29,28
1220 DATA 30,30,30,26,31,31,31,28,32,30,33
1230 DATA 33,33,28,34,31,35,29,21,31,21,24
1240 DATA 23,30,23,25,25,31,25,29,26,33,36,28,37
1250 DATA 3,5,35,35,27,36,32,36,30,37,32,38
```

```
126Ø DATA 9,13,17,27,18,29,2Ø,29,19,31,21,3Ø
127Ø DATA 21,32,23,33,22,34,24,35,23,36,21,36
128Ø DATA 25,37,16,23
```

Apple/*Cornucopia*

```
9 REM --CLEAR SCREEN AND SET FOR GRAPHICS--
1Ø HOME
2Ø GR
29 REM --DRAW LARGE, REGULAR AREAS OF PICTURE--
3Ø FOR X = 1 TO 1Ø
4Ø READ KO,F,T
5Ø COLOR= KO
6Ø FOR RO = F TO T
7Ø READ A,B
8Ø HLIN A,B AT RO
9Ø NEXT RO,X
99 REM --DRAW DETAILED AND IRREGULAR PARTS--
1ØØ FOR X = 1 TO 3
11Ø READ KO,T
12Ø COLOR= KO
13Ø FOR Y = 1 TO T
14Ø READ CO,RO
15Ø PLOT CO,RO
16Ø NEXT Y,X
17Ø GOTO 17Ø
1ØØØ DATA 13,1,33,3,3,3,4,3,5,3,6,3,7,3,8,3,9,3,1Ø,4
1Ø1Ø DATA 11,4,12,4,14,4,17,4,26,5,27,5,28,5,29,6,3Ø
1Ø2Ø DATA 6,31,7,31,7,32,7,32,8,32,8,32,9,32,9,32,1Ø
1Ø3Ø DATA 31,1Ø,31,11,31,12,17,13,17,15,17,16,19,18
1Ø4Ø DATA 26,1,14,34,21,23,2Ø,22,19,22,18,21,17,19,17
1Ø5Ø DATA 18,16,17,16,17,16,23,16,23,16,24,16,24,17
1Ø6Ø DATA 25,17,26,17,26,18,26,18,26,18,25,2Ø,25,21
1Ø7Ø DATA 24,22,23,12,14,22,24,26,23,27,23,28,22,29
1Ø8Ø DATA 22,28,23,27,24,28,24,27,24,25,3,2Ø,35,31,31
1Ø9Ø DATA 28,31,26,31,24,31,25,31,25,31,26,3Ø,27,3Ø
11ØØ DATA 27,3Ø,27,31,27,32,26,31,26,32,27,31,28,3Ø
111Ø DATA 29,29,11,18,23,2Ø,21,19,22,18,23,18,23,19
112Ø DATA 22,2Ø,21,3,24,26,18,19,17,2Ø,18,19,13,16,19
113Ø DATA 25,26,24,27,24,27,25,26,11,18,2Ø,29,3Ø,28
114Ø DATA 3Ø,29,3Ø,9,22,25,27,28,26,29,26,29,27,28,12
115Ø DATA 26,31,22,24,21,25,21,25,21,25,22,24,23,23,2
116Ø DATA 21,27,27,29,28,27,29,28,3Ø,3Ø,3Ø,26,31,31
117Ø DATA 31,28,32,3Ø,33,33,33,28,34,31,35,29,21,31
118Ø DATA 21,24,23,3Ø,23,25,25,31,25,29,26,33,36,28
119Ø DATA 37,3,5,35,35,27,36,32,36,3Ø,37,32,38,9,13
12ØØ DATA 17,27,18,29,2Ø,29,19,31,21,3Ø,21,32,23,33
121Ø DATA 22,34,24,35,23,36,21,36,25,37,16,23
```

Atari/*Cornucopia*

```
9 REM --RESERVE SPACE IN HIGH MEMORY--
1Ø S=(PEEK(1Ø6)-4)*256
2Ø POKE 1Ø6,S/256
3Ø GRAPHICS 17
39 REM --REDEFINE CHARACTERS A THROUGH I--
4Ø FOR X=S+264 TO S+335
5Ø READ SH
```

```
60 POKE X,SH
70 NEXT X
79 REM --RESET CHARACTER SET POINTER--
80 POKE 756,S/256
89 REM --MAIN DRAWING LOOP--
90 FOR X=1 TO 20
100 READ KO,F,T
110 COLOR KO
120 FOR RO=F TO T
130 READ A,B
140 PLOT A,RO
150 DRAWTO B,RO
160 NEXT RO
170 NEXT X
179 REM --WAIT FOR KEYPRESS--
180 POKE 764,255
189 REM --IF KEY IS PRESSED, RETURN SYSTEM TO NORMAL--
190 IF PEEK(764)<>255 THEN GRAPHICS 0:END
200 GOTO 190
1000 DATA 197,231,125,60,60,125,231,197,0,60,126,126
1010 DATA 126,126,60,0,60,126,255,255,255,255,126,60
1020 DATA 168,1,148,33,148,1,84,34,3,15,31,63,127,127
1030 DATA 255,255,192,240,248,252,254,254,255,255,255
1040 DATA 255,127,127,63,31,15,3,255,255,254,254,252
1050 DATA 248,240,192,255,255,255,255,255,255,255,255
1060 DATA 65,0,22,0,0,0,1,0,2,0,3,0,4,1,5,1,13,1,14,2
1070 DATA 15,2,16,2,16,2,17,3,17,3,17,4,17,4,17,5,17
1080 DATA 5,17,6,17,6,7,7,7,8,15,11,12,226,11,23,14
1090 DATA 14,13,14,13,16,13,15,13,14,8,8,8,8,8,9,8,10
1100 DATA 8,13,9,14,13,14,14,15,194,7,23,11,11,10,11
1110 DATA 10,11,9,13,8,13,8,11,8,8,8,8,8,8,8,8,9,12
1120 DATA 10,12,10,15,14,16,15,17,15,17,17,18,99,8,23
1130 DATA 14,14,14,15,14,15,15,16,15,16,15,15,16,16
1140 DATA 15,16,16,16,16,16,15,17,16,17,17,17,9,10,10
1150 DATA 10,11,11,68,12,23,12,12,11,12,11,12,11,13
1160 DATA 11,12,10,11,10,10,10,10,9,9,9,10,9,10,10,11
1170 DATA 233,8,8,12,13,105,13,15,9,10,9,10,9,10,73
1180 DATA 16,18,14,14,13,15,14,14,229,7,7,12,12,101
1190 DATA 12,12,9,9,69,16,16,13,13,230,7,7,13,13,102
1200 DATA 12,12,10,10,70,16,16,15,15,231,9,9,12,12
1210 DATA 103,16,16,9,9,71,18,18,13,13,232,9,9,13,13
1220 DATA 104,16,16,10,10,72,18,18,15,15
```

Commodore 64/*Cornucopia*

```
10 PRINT CHR$(147);
19 REM --SET SCREEN BORDER AND BACKGROUND TO BLACK--
20 POKE 53280,0
30 POKE 53281,0
39 REM --MAIN DRAWING LOOP--
40 FOR X=1 TO 13
50 READ CH,KO,F,T
60 FOR RO=F TO T
70 READ A,B
80 FOR CO=A TO B
89 REM --POKE SCREEN WITH CHARACTER--
90 POKE 1024+CO+40*RO,CH
99 REM --POKE COLOR MEMORY WITH COLOR--
100 POKE 55296+CO+40*RO,KO
```

```
110 NEXT CO,RO,X
120 GOTO 120
1000 DATA 86,9,1,23,3,3,3,4,3,5,3,6,3,7,3,9,4
1010 DATA 27,4,28,4,29,5,30,5,31,6,32,7,32,7
1020 DATA 32,8,32,9,13,10,14,11,14,13,15,14
1030 DATA 16,16,17,18,28,26,27,81,4,7,17,19
1040 DATA 23,18,22,17,22,16,21,16,21,15,19,15,18,14
1050 DATA 14,14,14,14,15,15,15,81,13,15,24,24,24,23
1060 DATA 23,22,22,21,21,20,21,18,22,18,23,19,26,20
1070 DATA 25,23,26,81,4,15,22,29,31,27,33,28,34,29
1080 DATA 33,29,32,28,33,27,31,30,32
1090 DATA 160,7,9,12,23,24,22,25,22,25,23,24
1100 DATA 160,5,12,17,20,22,19,23,19,23,19,23,20
1110 DATA 22,21,21,102,14,8,10,26,27,25,28,26,27
1120 DATA 160,8,11,15,26,27,25,28,24,29,24,29,25,28
1130 DATA 160,2,16,21,24,26,23,27,22,28,22,28,23,27
1140 DATA 24,26,87,6,10,14,28,29,28,30,29,31,30,31
1150 DATA 30,31,88,6,16,19,18,19,17,20,17,20,18,19
1160 DATA 42,2,13,20,16,17,15,18,15,18,16,17
1170 DATA 16,16,15,16,16,17,17,17
1180 DATA 90,10,7,8,24,24,23,25
```

IBM PC w/Color Graphics Adapter & IBM PC*jr*/*Cornucopia*

```
9 REM --set screen width and enable color burst--
10 WIDTH 40
20 SCREEN 0,1
29 REM --clear screen and set to black--
30 KEY OFF
40 COLOR 0,0
50 CLS
60 LOCATE ,,0
70 FOR X=1 TO 13
79 REM --main drawing loop--
80 READ CH,KO,F,T
90 COLOR KO
100 FOR RO=F TO
110 READ A,B
120 FOR CO=A TO B
130 LOCATE RO,CO
140 PRINT CHR$(CH);
150 NEXT CO,RO,X
160 GOTO 160
1000 DATA 88,6,1,23,3,3,3,4,3,5,3,6,3,7,3,9,4
1010 DATA 27,4,28,4,29,5,30,5,31,6,32,7,32,7
1020 DATA 32,8,32,9,13,10,14,11,14,13,15,14,16
1030 DATA 16,17,18,28,26,27,3,5,7,17,19,23,18
1040 DATA 22,17,22,16,21,16,21,15,19,15,18,14
1050 DATA 14,14,14,14,15,15,15,3,10,15,24,24
1060 DATA 24,23,23,22,22,21,21,20,21,18,22,18
1070 DATA 23,19,26,20,25,23,26,3,5,15,22,29,31
1080 DATA 27,33,28,34,29,33,29,32,28,33,27,31
1090 DATA 30,32,219,14,9,12,23,24,22,25,22,25
1100 DATA 23,24,219,2,12,17,20,22,19,23,19,23
1110 DATA 19,23,20,22,21,21,176,1,8,10,26,27
1120 DATA 25,28,26,27,219,12,11,15,26,27,25,28
1130 DATA 24,29,24,29,25,28,219,4,16,21,24,26
1140 DATA 23,27,22,28,22,28,23,27,24,26,79,1
```

```
1150 DATA 10,14,28,29,28,30,29,31,30,31,30,31
1160 DATA 5,1,16,19,18,19,17,20,17,20,18,19,42
1170 DATA 4,13,20,16,17,15,18,15,18,16,17,16
1180 DATA 16,15,16,16,17,17,17,4,12,7,8,24,24
1190 DATA 23,25
```

TI-99/4A/*Cornucopia*

```
9 REM --CLEAR SCREEN AND SET BACKGROUND COLOR--
10 CALL CLEAR
20 CALL SCREEN(2)
29 REM --DEFINE 14 SPECIAL CHARACTERS--
30 FOR X=1 TO 14
40 READ SH$,CH,SE,KF,KB
50 CALL CHAR(CH,SH$)
60 CALL COLOR(SE,KF,KB)
70 NEXT X
79 REM --DRAW LARGE, REGULAR AREAS OF PICTURE--
80 FOR X=1 TO 4
90 READ CH,F,T
100 FOR RO=F TO T
110 READ CO,EX
120 CALL HCHAR(RO,CO,CH,EX)
130 NEXT RO
140 NEXT X
149 REM --DRAW DETAILED AND IRREGULAR PARTS--
150 FOR X=1 TO 36
160 READ CH,RO,CO
170 CALL HCHAR(RO,CO,CH)
180 NEXT X
190 GOTO 190
1000 DATA A801942194015422,96,9,6,1
1010 DATA 003C7E7E7E7E3C00,104,10,4,1
1020 DATA 003C7E7E7E7E3C00,112,11,14,1
1030 DATA C5E77D3C3C7DE7C5,120,12,12,1
1040 DATA 030F1F3F7F7FFFFF,128,13,11,1
1050 DATA C0F0F8FCFEFEFFFF,136,14,11,1
1060 DATA FFFF7F7F3F1F0F03,144,15,11,1
1070 DATA FFFFFEFEFCF8F0C0,152,16,11,1
1080 DATA FFFFFFFFFFFFFFFF,95,8,11,1
1090 DATA 030F1F3F7F7FFFFF,39,1,7,1
1100 DATA C0F0F8FCFEFEFFFF,47,2,7,1
1110 DATA FFFF7F7F3F1F0F03,55,3,7,1
1120 DATA FFFFFEFEFCF8F0C0,63,4,7,1
1130 DATA FFFFFFFFFFFFFFFF,64,5,7,1
2000 DATA 120,2,22,3,1,3,2,3,3,3,4,3,5,3,8,4,20
2010 DATA 4,21,4,22,5,22,5,23,6,23,7,22,7,22,8
2020 DATA 21,9,20,10,14,11,3,13,2,14,1,15,7
2030 DATA 104,9,24,15,4,14,3,13,5,13,3,13,3
2040 DATA 13,4,13,4,13,5,13,2,14,2,14,1,15,1
2050 DATA 15,5,17,3,18,3,20,2,96,10,23,17,2,18
2060 DATA 2,18,1,18,2,17,5,17,4,18,9,17,9
2070 DATA 16,10,15,9,16,9,20,6,22,4,24,2,112,9
2080 DATA 23,19,5,19,6,20,6,19,8,20,8,22,6,26
2090 DATA 2,27,1,26,2,25,4,23,6,24,4,26,2
2100 DATA 26,3,27,3,39,10,20,64,10,21,47
2110 DATA 10,22,64,11,20,64,11,21,64,11,22
2120 DATA 55,12,20,64,12,21,63,12,22,39,18,17
```

```
2130 DATA 64,18,18,47,18,19,64,19,17,64,19,18
2140 DATA 64,19,19,55,20,17,64,20,18,63,20,19
2150 DATA 128,12,16,136,12,17,144,13,16,152,13,17,128
2160 DATA 16,15,136,16,16,144,17,15,152,17,16,128,15
2170 DATA 21,95,15,22,95,15,23,95,15,24,136,15,25,144
2180 DATA 16,21,95,16,22,95,16,23,95,16,24,152,16,25
```

Timex Sinclair 1000 w/16K RAM Pack & Timex Sinclair 1500/*Cornucopia*

```
9 REM --D$ CONTAINS PICTURE DATA--
10 LET D$="136,1,19,2,2,2,3,2,4,2,5,3,6,3,8,3,10,4,22,
4,23,4,24,5,25,5,25,6,25,7,25,8,25,9,25,10,15,12,16,14
,18,52,9,21,17,22,16,23,15,24,15,24,15,24,15,24,15,24,
16,24,16,25,17,26,19,27,20,23,22,24,23,11,19,19,21,20,
21,20,21,19,21,17,22,18,18,18,23,19,23,20,21,6,9,11,18
,21,18,21,20,20,128,11,18,17,18,16,19,16,19,17,18,20,2
1,19,22,19,22,20,21,"
19 REM --SET DATA POINTERS FOR SIMULATED 'READ'--
20 LET P1=4
30 LET P2=1
38 REM --MAIN DRAWING LOOP--
39 REM --EACH 'GOSUB 1000' RETURNS ONE NUMBER--
40 FOR X=1 TO 5
50 GOSUB 1000
60 LET CH=D
70 GOSUB 1000
80 LET F=D
90 GOSUB 1000
100 LET T=D
110 FOR R=F TO T
120 GOSUB 1000
130 LET A=D
140 GOSUB 1000
150 LET B=D
160 FOR C=A TO B
170 PRINT AT R,C;CHR$ CH;
180 NEXT C
190 NEXT R
200 NEXT X
210 SLOW
220 GOTO 220
999 REM --SIMULATED READ/DATA SUBROUTINE--
1000 IF D$(P1)="," THEN GOTO 1030
1010 LET P1=P1+1
1020 GOTO 1000
1030 LET D=VAL D$(P2 TO P1-1)
1040 LET P2=P1+1
1050 LET P1=P2+1
1060 RETURN
```

TRS-80 Color Computer/*Cornucopia*

```
9 REM --CLEAR SCREEN AND SET TO BLACK--
10 CLS(0)
19 REM --DRAW LARGE, REGULAR AREAS OF PICTURE--
20 FOR X=1 TO 7
30 READ K0,F,T
```

```
40 FOR RO=F TO T
50 READ A,B
60 FOR CO=A TO B
70 PRINT@CO+32*RO,CHR$(KO);
80 NEXT CO,RO,X
89 REM --DRAW DETAILED AND IRREGULAR PARTS--
90 FOR X=1 TO 5
100 READ KO,CO,RO
110 PRINT@CO+32*RO,CHR$(KO);
120 NEXT X
130 GOTO 130
1000 DATA 159,0,14,0,0,0,2,0,4,1,6,1,8
1010 DATA 2,10,2,23,3,25,3,26,4,27,5,27
1020 DATA 6,27,8,27,10,14,12,17
1030 DATA 233,7,15,16,19,15,20,13,16
1040 DATA 13,17,13,19,14,21,15,21,18,22,19,20
1050 DATA 217,7,14,20,23,21,25,21,26
1060 DATA 20,26,20,26,24,26,22,27,23,25
1070 DATA 255,8,10,18,19,17,20,18,19
1080 DATA 223,11,13,16,17,15,18,16,17
1090 DATA 159,10,12,22,23,21,24,22,23
1100 DATA 191,12,14,20,21,19,22,20,21
1110 DATA 225,17,15,225,22,15
1120 DATA 209,26,15,210,28,14
1130 DATA 210,29,15
```

TRS-80 Model III/*Cornucopia*

```
9 REM --CLEAR SCREEN--
10 CLS
19 REM --DRAW LARGE, REGULAR AREAS OF PICTURE--
20 FOR X=1 TO 6
30 READ CH,F,T
40 FOR RO=F TO T
50 READ A,B
60 FOR CO=A TO B
70 POKE 15360+CO+64*RO,CH
80 NEXT CO,RO,X
89 REM --DRAW DETAILED AND IRREGULAR PARTS--
90 FOR X=1 TO 28
100 READ CH,CO,RO
110 POKE 15360+CO+64*RO,CH
120 NEXT X
130 GOTO 130
1000 DATA 191,0,13,7,7,7,8,7,10,8,13,8,16,9,20,10,25
1010 DATA 11,45,12,48,13,49,15,49,17,49,20,26,25,31
1020 DATA 239,8,15,28,32,25,28,25,28,25,29,28,34,32
1030 DATA 34,30,34,33,36,42,8,15,33,39,36,38,36,39
1040 DATA 35,36,35,35,35,38,36,41,41,43,64,8,14,40
1050 DATA 45,39,48,40,48,43,48,43,49,39,50,44,47,191
1060 DATA 9,9,41,42,191,11,12,39,40,39,40,184,29,9
1070 DATA 180,35,9,175,29,10,159,35,10,130,30,11,129
1080 DATA 34,11,139,31,11,135,33,11,184,37,11,180,42
1090 DATA 11,139,37,12,135,42,12,190,38,11,189,41,11
1100 DATA 175,38,12,159,41,12,160,40,8,144,43,8,139
1110 DATA 40,9,135,43,9,188,41,8,188,42,8,191,46,11
1120 DATA 191,46,12,184,45,11,180,47,11,139,45,12
1130 DATA 135,47,12
```

```
9 REM --RESERVE SPACE IN HIGH MEMORY--
10 POKE 52,24
20 POKE 56,24
30 CLR
39 REM --RESET CHARACTER SET POINTER--
40 POKE 36869,254
50 PRINT CHR$(147);
59 REM --SET SCREEN COLOR TO BLACK--
60 POKE 36879,8
69 REM --REDEFINE SPACE CHARACTER--
70 FOR X=6400 TO 6407
80 POKE X,0
90 NEXT X
99 REM --REDEFINE CHARACTERS @ THROUGH E--
100 FOR X=6144 TO 6191
110 READ SH
120 POKE X,SH
130 NEXT X
139 REM --MAIN DRAWING LOOP--
140 FOR X=1 TO 22
150 READ CH,KO,F,T
160 FOR RO=F TO T
170 READ A,B
180 FOR CO=A TO B
190 POKE 7680+CO+22*RO,CH
200 POKE 38400+CO+22*RO,KO
210 NEXT CO,RO,X
220 GOTO 220
1000 DATA 168,1,148,33,148,1,84,34
1010 DATA 3,15,31,63,127,127,255,255
1020 DATA 192,240,248,252,254,254,255,255
1030 DATA 255,255,127,127,63,31,15,3
1040 DATA 255,255,254,254,252,248,240,192
1050 DATA 197,231,125,60,60,125,231,197
2000 DATA 5,7,0,21,0,0,0,1,0,2,0,2,0,3
2010 DATA 1,4,1,5,1,7,1,10,2,14,2,15
2020 DATA 2,16,3,17,3,18,4,18,5,18
2030 DATA 5,18,6,18,7,18,8,8,9,9,10,11
2040 DATA 81,5,10,22,11,13,10,14,9,12
2050 DATA 8,12,8,9,8,9,8,10,8,9,8,9
2060 DATA 9,10,10,11,12,13,13,14
2070 DATA 81,6,10,22,14,14,15,15,15,16
2080 DATA 15,17,15,17,16,17,17,17,17,17
2090 DATA 14,17,16,18,16,19,17,18,18,19
2100 DATA 81,2,14,22,13,14,13,15,12,13
2110 DATA 13,13,13,13,14,15,15,15,15,16,15,15
2120 DATA 1,5,16,16,14,14,2,5,16,16,15,15
2130 DATA 3,5,17,17,14,14,4,5,17,17,15,15
2140 DATA 6,6,16,17,16,16,16,16
2150 DATA 1,7,12,12,13,13,2,7,12,12,14,14
2160 DATA 3,7,13,13,13,13,4,7,13,13,14,14
2170 DATA 1,2,14,14,10,10,2,2,14,14,11,11
2180 DATA 3,2,15,15,10,10,4,2,15,15,11,11
2190 DATA 1,4,17,17,10,10,2,4,17,17,11,11
2200 DATA 3,4,18,18,10,10,4,4,18,18,11,11
2210 DATA 0,3,13,21,11,11,12,12,12,12,11,11
2220 DATA 12,12,12,12,11,13,12,14,14,14
```

TURKEY

When the relatives arrive at your house on Thanksgiving Day to the sweet aroma of a cooking turkey, keep them out of the kitchen by setting up your computer with a totally different kind of turkey for them to feast their eyes on.

ADAM & Apple/*Turkey*

```
10 HOME
20 GR
30 COLOR= 15
40 FOR Z = 0 TO 39
50 HLIN 0,39 AT Z
60 NEXT Z
70 COLOR= 0
80 HLIN 14,18 AT 1
90 FOR Z = 1 TO 25
100 READ X,Y
110 HLIN X,Y AT Z
120 NEXT Z
130 COLOR= 9
140 HLIN 16,18 AT 3
150 FOR Z = 3 TO 21
160 READ X,Y
170 HLIN X,Y AT Z
180 NEXT Z
190 COLOR= 8
200 FOR Z = 19 TO 27
210 READ X,Y
220 HLIN X,Y AT Z
230 READ X,Y
240 HLIN X,Y AT Z
250 NEXT Z
260 COLOR= 8
270 FOR Z = 6 TO 32
280 READ X,Y
290 HLIN X,Y AT Z
300 NEXT Z
310 COLOR= 13
320 VLIN 32,35 AT 16
330 VLIN 32,35 AT 23
340 PLOT 15,36
350 PLOT 17,36
360 PLOT 22,36
370 PLOT 24,36
380 PLOT 14,37
390 PLOT 18,37
400 PLOT 21,37
410 PLOT 25,37
420 COLOR= 7
430 PLOT 18,9
440 PLOT 20,9
450 COLOR= 13
460 PLOT 19,10
470 COLOR= 9
480 VLIN 12,15 AT 19
```

```
490 GOTO 490
1000 DATA 14,24,12,26,9,29,9,29,8,30,7,32,7,33,7,34,5
1010 DATA 34,3,36,2,37,1,38,1,39,0,39,0,39,0,39,0,39,0
1020 DATA 39,0,39,1,38,2,37,3,36,4,35,5,34,6,33,20,22
1030 DATA 15,26,15,27,14,28,11,28,10,31,10,31,9,31,8
1040 DATA 32,6,33,6,33,5,34,5,34,6,33,6,32,7,32,7,31,7
1050 DATA 31,8,31,9,10,27,28,8,9,28,29,7,9,28,30,7,9
1060 DATA 28,30,6,9,28,31,5,9,28,32,5,9,28,32,5,8,29
1070 DATA 32,6,7,30,31,18,20,17,21,17,21,17,21,17,21
1080 DATA 17,21,16,22,15,23,14,24,13,25,12,26,11,27,10
1090 DATA 27,10,27,10,27,10,27,10,27,10,27,10,27,10,27
1100 DATA 11,26,11,26,12,25,12,25,13,24,15,23,17,22
```

Atari/*Turkey*

```
10 GRAPHICS 5+16
20 SETCOLOR 2,3,3
30 READ C,N
40 IF C=999 THEN 40
50 COLOR C
60 FOR Z=1 TO N
70 READ X,Y,A,B
80 PLOT X,Y
90 DRAWTO A,B
100 NEXT Z
110 GOTO 30
1000 DATA 3,36,32,0,38,0,43,0,48,0,30,1,39,1
1010 DATA 41,1,50,1,29,2,51,2,28,3,52,3,27,4
1020 DATA 53,4,26,5,54,5,26,6,58,6,23,7,60,7
1030 DATA 19,8,62,8,17,9,63,9,16,10,64,10,15
1040 DATA 11,65,11,14,12,67,12,13,13,69,13,12
1050 DATA 14,70,14,12,15,71,15,11,16,71,16,11
1060 DATA 17,72,17,10,18,73,18,9,19,73,19,9
1070 DATA 20,73,20,8,21,73,21,7,22,74,22,7,23
1080 DATA 74,23,6,24,75,24,6,25,75,25,7,26,75
1090 DATA 26,7,27,74,27,8,28,74,28,9,29,73,29
1100 DATA 10,30,72,30,11,31,71,31,13,32,70,32
1110 DATA 15,33,68,33,0,24,38,4,41,4,35,5,43
1120 DATA 5,34,6,44,6,33,7,45,7,33,8,46,8,32
1130 DATA 9,49,9,29,10,50,10,28,11,51,11,27
1140 DATA 12,52,12,26,13,52,13,25,14,53,14,25
1150 DATA 15,55,15,22,16,58,16,21,17,60,17,20
1160 DATA 18,61,18,19,19,61,19,18,20,62,20,17
1170 DATA 21,62,21,17,22,62,22,17,23,62,23,17
1180 DATA 24,62,24,18,25,61,25,18,26,61,26,19
1190 DATA 27,61,27,1,41,38,7,41,7,37,8,42,8
1200 DATA 37,9,42,9,36,10,43,10,36,11,43,11
1210 DATA 36,12,43,12,36,13,43,13,35,14,44,14
1220 DATA 34,15,46,15,32,16,48,16,30,17,49,17
1230 DATA 29,18,51,18,28,19,52,19,26,20,53,20
1240 DATA 25,21,54,21,24,22,55,22,23,23,56,23
1250 DATA 22,24,57,24,22,25,58,25,21,26,59,26
1260 DATA 20,27,60,27,19,28,60,28,19,29,61,29
1270 DATA 18,30,61,30,18,31,62,31,18,32,62,32
1280 DATA 17,33,62,33,17,34,22,34,25,34,53,34
1290 DATA 57,34,62,34,17,35,21,35,25,35,53,35
1300 DATA 58,35,62,35,19,36,21,36,26,36,52,36
1310 DATA 60,36,62,36,27,37,52,37,28,38,51,38
```

```
1320 DATA 29,39,49,39,32,40,47,40,33,41,46,41
1330 DATA 2,7,33,41,33,44,46,41,46,44,32,45
1340 DATA 30,47,34,45,36,47,45,45,43,47,47,45
1350 DATA 49,47,40,10,40,10,0,2,39,9,39,9,41
1360 DATA 9,41,9,3,1,40,12,40,18,999,999
```

Commodore 64/*Turkey*

```
10 PRINT CHR$(147)
20 POKE 53280,1
30 POKE 53281,1
40 READ B,CH,CO
50 IF B=0 THEN 50
60 FOR Z=1 TO B
70 READ X,Y
80 FOR P=X TO Y
90 POKE P,CH
100 POKE P+54272,CO
110 NEXT P
120 NEXT Z
130 GOTO 40
1000 DATA 17,73,0,1040,1043,1046,1050,1079
1010 DATA 1091,1116,1131,1155,1174,1194,1215
1020 DATA 1234,1255,1271,1295,1310,1335,1349
1030 DATA 1376,1388,1418,1428,1459,1468,1499
1040 DATA 1508,1539,1549,1578,1590,1616,1631
1050 DATA 1654,15,74,8,1121,1122,1124,1125
1060 DATA 1160,1169,1199,1210,1236,1250,1276
1070 DATA 1291,1315,1333,1353,1375,1393,1413
1080 DATA 1433,1453,1473,1493,1514,1534,1554
1090 DATA 1574,1613,1614,1653,1653,9,21,10
1100 DATA 1516,1530,1555,1571,1594,1612,1633
1110 DATA 1652,1673,1693,1713,1715,1731,1733
1120 DATA 1753,1754,1772,1773,17,160,9,1202
1130 DATA 1204,1241,1245,1281,1285,1321,1325
1140 DATA 1361,1365,1399,1406,1438,1448,1477
1150 DATA 1489,1516,1530,1556,1570,1596,1610
1160 DATA 1636,1650,1676,1690,1717,1729,1757
1170 DATA 1769,1798,1808,1839,1848,12,90,7
1180 DATA 1880,1880,1920,1920,1927,1927,1887
1190 DATA 1887,1959,1959,1961,1961,1966,1966
1200 DATA 1968,1968,1998,1998,2002,2002,2005
1210 DATA 2005,2009,2009,3,83,2,1363,1363
1220 DATA 1403,1403,1443,1443,2,87,6,1282
1230 DATA 1282,1284,1284,1,22,7,1323,1323
1240 DATA 0,0,0
```

IBM PCs/*Turkey*

```
10 KEY OFF
20 WIDTH 80
30 LOCATE ,,0
40 CLS
50 READ N,C
60 IF N=999 THEN 150
70 FOR I=1 TO N
80 READ Y,B,E
90 FOR X=B TO E
```

```
100 LOCATE Y,X
110 PRINT CHR$(C)
120 NEXT X
130 NEXT I
140 GOTO 50
150 READ Y,X,C
160 LOCATE Y,X
170 PRINT CHR$(C);
180 IF X=45 THEN 180
190 GOTO 150
1000 DATA 19,40,1,33,38,1,42,47,2,30,50,3,29
1010 DATA 51,4,28,52,5,25,55,6,24,56,7,23,57
1020 DATA 8,21,59,9,20,60,10,19,61,11,18,62
1030 DATA 12,18,62,13,17,63,14,16,64,15,16,64
1040 DATA 16,17,63,17,18,62,18,21,59,14,117,3
1050 DATA 35,45,4,34,46,5,32,48,6,32,48,7,29
1060 DATA 51,8,28,52,9,26,54,10,25,55,11,24
1070 DATA 56,12,23,57,13,23,57,14,23,57,15,23
1080 DATA 57,16,24,56,22,73,4,38,42,5,37,43,6
1090 DATA 37,43,7,37,43,8,36,44,9,34,46,10,32
1100 DATA 48,11,31,49,12,30,50,13,28,52,14,27
1110 DATA 53,15,27,53,16,26,54,17,25,55,18,25
1120 DATA 55,19,25,29,19,32,48,19,51,55,20,25
1130 DATA 28,20,33,47,20,52,55,21,34,46,999
1140 DATA 999,5,39,111,5,40,0,5,41,111,6,40
1150 DATA 94,7,40,94,8,40,94,9,40,94,22,36,88
1160 DATA 22,44,88,23,36,88,23,44,88,24,35,88
1170 DATA 24,37,88,24,43,88,24,45,88
```

TI-99/4A/*Turkey*

```
10 CALL CLEAR
20 CALL SCREEN(2)
30 READ CS,CHAR,F,B
40 IF CS=0 THEN 120
50 CALL COLOR(CS,F,B)
60 READ X,Y
70 FOR COLUMN=X TO Y
80 READ ROW,REP
90 CALL VCHAR(ROW,COLUMN,CHAR,REP)
100 NEXT COLUMN
110 GOTO 30
120 CALL COLOR(6,16,6)
130 CALL HCHAR(7,15,79,1)
140 CALL HCHAR(7,17,79,1)
150 CALL COLOR(7,12,7)
160 CALL HCHAR(8,16,86,1)
170 CALL COLOR(11,10,7)
180 FOR ROW=9 TO 11
190 CALL VCHAR(ROW,16,118,3)
200 NEXT ROW
210 GOTO 210
1000 DATA 2,40,7,1,1,32,10,4,9,6,8,8,7,10,7
1010 DATA 10,5,11,4,5,3,5,3,3,3,3,2,4,2,3,2,2
1020 DATA 1,2,1,2,1,2,1,2,1,2,1,3,1,3,2,2,2,2
1030 DATA 2,3,3,4,4,3,4,12,5,12,5,11,8,8,10,5
1040 DATA 10,5,11,3,12,125,12,1,6,27,9,4,9,6
1050 DATA 8,6,6,7,6,6,6,5,5,5,4,6,3,3,3,2,3,2
```

```
1060 DATA 3,2,3,3,4,6,4,6,4,7,4,8,5,8,7,7,7,8
1070 DATA 8,6,9,4,7,85,15,1,6,9,16,4,15,5,14
1080 DATA 5,13,5,7,85,15,1,23,26,13,5,14,5,14
1090 DATA 6,16,4,9,96,7,7,10,22,12,8,11,10,10
1100 DATA 12,10,12,6,16,5,17,5,17,5,17,6,16
1110 DATA 10,12,10,12,11,10,12,8,8,94,12,1,12
1120 DATA 14,24,1,22,2,24,1,8,94,12,1,18,20
1130 DATA 24,1,22,2,24,1,0,0,0,0
```

Timex Sinclair 1000 & 1500/*Turkey*

```
10 LET YY=8.6
20 LET XX=15
30 LET I=16
40 LET B=9
50 LET A=12
60 GOSUB 320
70 LET XX=15
80 LET I=27
90 LET B=8
100 LET A=7
110 GOSUB 320
120 LET XX=15
130 LET YY=7.7
140 LET I=8
150 LET A=2.7
160 LET B=3.4
170 GOSUB 320
180 LET YY=14
190 LET A=5.4
200 LET B=5.4
210 GOSUB 320
220 PRINT AT 12,10;CHR$ 27;AT 17,20;CHR$ 8
230 PRINT AT 19,18;CHR$ 8;AT 20,13;"I"
240 PRINT AT 20,17;"I";AT 8,12;"."
250 PRINT AT 7,12;".";AT 5,13;"."
260 PRINT AT 4,15;".";AT 7,14;"*"
270 PRINT AT 7,16;"*";AT 21,16;"I"
280 PRINT AT 21,18;"I";AT 21,12;"I"
290 PRINT AT 21,14;"I";AT 8,15;"+"
300 PRINT AT 9,15;"+";AT 10,15;"+"
310 GOTO 310
320 FOR Y=YY-B TO YY+B
330 LET P=(ABS (Y-YY))**2
340 LET M=A*SQR (ABS (1-P/B**2))
350 FOR X=XX-M TO XX+M
360 PRINT AT Y,X;CHR$ I
370 NEXT X
380 NEXT Y
390 RETURN
```

TRS-80 Color Computer/*Turkey*

```
10 CLS(0)
20 READ N,C
30 IF N=999 THEN 110
40 FOR M=1 TO N
50 READ Y,B
```

```
60 FOR X=31-B TO 31+B
70 SET (X,Y,C)
80 NEXT X
90 NEXT M
100 GOTO 20
110 READ Y,B,E,C
120 IF Y=0 THEN 170
130 FOR X=B TO E
140 SET (X,Y,C)
150 NEXT X
160 GOTO 110
170 POKE B,E
180 IF B=1200 THEN 180
190 READ B,E
200 GOTO 170
1000 DATA 23,7,3,13,4,15,5,17,6,19,7,21,8,23
1010 DATA 9,24,10,25,11,26,12,27,13,28,14,28
1020 DATA 15,29,16,29,17,30,18,30,19,30,20,31
1030 DATA 21,31,22,31,23,30,24,28,25,25,20,4
1040 DATA 4,6,5,7,6,8,7,10,8,11,9,12,10,15,11
1050 DATA 17,12,18,13,19,14,20,15,21,16,22,17
1060 DATA 22,18,23,19,23,20,23,21,22,22,22,23
1070 DATA 21,20,1,6,3,7,3,8,3,9,3,10,3,11,3
1080 DATA 12,7,13,9,14,11,15,13,16,14,17,15
1090 DATA 18,16,19,17,20,17,21,18,22,18,23,19
1100 DATA 24,19,25,19,999,999,1,23,26,7,1,36
1110 DATA 39,7,2,21,28,7,2,34,41,7,26,21,41,1
1120 DATA 26,45,50,1,26,12,17,1,27,22,40,1,27
1130 DATA 47,50,1,27,12,15,1,28,23,39,1,29,26
1140 DATA 27,2,29,36,37,2,30,26,27,2,30,36,37
1150 DATA 2,31,24,25,2,31,34,35,2,31,28,29,2
1160 DATA 31,38,39,2,0,1167,135,0,1168,139
1170 DATA 1199,138,1200,133
```

TRS-80 Model III/*Turkey*

```
10 PRINT CHR$(15)
20 CLS
30 READ X,Y,C
40 IF X=9999 THEN 90
50 FOR I=X TO Y
60 PRINT@I,CHR$(C);
70 NEXT I
80 GOTO 30
90 FOR I=1 TO 21
100 READ X,C
110 PRINT@X,CHR$(C);
120 NEXT I
130 GOTO 130
1000 DATA 23,37,40,84,104,40,145,171,40,207
1010 DATA 237,40,269,303,40,331,369,40,394
1020 DATA 434,40,457,499,40,520,564,40,583
1030 DATA 629,40,649,691,40,716,752,40,151
1040 DATA 165,117,213,231,117,276,296,117
1050 DATA 339,361,117,402,426,117,465,491
1060 DATA 117,528,556,117,592,620,117,658
1070 DATA 682,117,220,224,191,283,289,191
1080 DATA 347,353,191,410,418,191,472,484
```

```
1090 DATA 191,534,550,191,596,616,191,659
1100 DATA 681,191,721,747,191,785,787,191
1110 DATA 790,806,191,809,811,191,28,32
1120 DATA 32,9999,0,0,158,176,220,190,224
1130 DATA 189,283,186,289,181,346,184
1140 DATA 354,180,409,176,419,176,285
1150 DATA 111,287,111,350,64,414,64,858
1160 DATA 88,866,88,922,88,930,88,985
1170 DATA 88,987,88,993,88,995,88
```

VIC-20/*Turkey*

```
10 PRINT CHR$(147)
20 READ B,CH,CO
30 IF B=0 THEN 30
40 FOR Z=1 TO B
50 READ X,Y
60 FOR P=X TO Y
70 POKE P,CH
80 POKE P+30720,CO
90 NEXT P
100 NEXT Z
110 GOTO 20
1000 DATA 15,0,0,7689,7694,7707,7719,7728,7742
1010 DATA 7794,7765,7770,7788,7792,7810,7813
1020 DATA 7832,7835,7855,7857,7877,7878,7899
1030 DATA 7900,7921,7922,7943,7944,7964,7966
1040 DATA 7986,7989,8008,11,28,2,7733,7735
1050 DATA 7753,7760,7774,7783,7796,7806,7817
1060 DATA 7829,7839,7851,7860,7874,7881,7897
1070 DATA 7902,7919,7924,7940,7946,7962,7,22,2
1080 DATA 7969,7983,7990,8006,8012,8028,8033
1090 DATA 8051,8055,8073,8078,8079,8093,8094
1100 DATA 16,160,2,7799,7801,7820,7824,7842
1110 DATA 7846,7864,7868,7885,7891,7906,7914
1120 DATA 7927,7937,7948,7960,7970,7982,7992
1130 DATA 8004,8014,8026,8036,8048,8058,8070
1140 DATA 8081,8091,8104,8112,8128,8132,6,90,7
1150 DATA 8150,8150,8154,8154,8171,8171,8173
1160 DATA 8173,8175,8175,8177,8177,1,22,7,7844
1170 DATA 7844,2,15,6,7821,7821,7823,7823,3,83
1180 DATA 2,7866,7866,7888,7888,7910,7910
1190 DATA 0,0,0
```

CHRISTMAS TREE

As the snow falls outside, your family can gather 'round the computer with glasses of eggnog and fall under the spell of our *Christmas Tree* program. Watch your computer trim a tree on the screen and surround its base with beautifully wrapped presents, while the tree lights flicker to the familiar tune of an old Christmas song.
(Note: The TRS-80 Model III and Timex versions do not include music.)

Apple/*Christmas Tree*

```
10 HM = PEEK(116)*256+PEEK(115)
20 HIMEM: HM-23
30 DIM LIGHT(50),BOX(3,2),S(64)
40 GR
50 POKE -16302,0
60 CALL -1998
70 INC = 2
80 COUNT = 19
90 COLOR= 4
100 FOR A = 7 TO 33
110 HOLD = A
120 FOR B = 1 TO 2
130 GOSUB 2000
140 NEXT B
150 COUNT = COUNT-1
160 INC = INC+2
170 NEXT A
180 READ C,L,H,X
190 IF C = -1 THEN 250
200 COLOR= C
210 FOR A = L TO H
220 VLIN X,44 AT A
230 NEXT A
240 GOTO 180
250 COLOR= 13
260 FOR A = 1 TO 13
270 READ F,G
280 PLOT F,G
290 NEXT A
300 FOR A = 1 TO 3
310 READ BOX(A,1),BOX(A,2)
320 NEXT A
330 FOR A = 12 TO 17
340 COLOR= 10
350 IF A <> INT(A/2)*2 THEN 400
360 PLOT A,BOX(1,1)
370 PLOT A,BOX(2,1)
380 PLOT A,BOX(3,1)
390 GOTO 430
400 PLOT A,BOX(1,2)
410 PLOT A,BOX(2,2)
420 PLOT A,BOX(3,2)
430 NEXT A
440 COLOR= 13
```

```
450 FOR A = 36 TO 44
460 TEMP = A
470 COLOR= 3
480 IF TEMP = 2*INT(A/2) THEN HLIN 24,28 AT A
490 NEXT A
500 COLOR= 1
510 FOR A = 30 TO 36
520 VLIN 42,44 AT A
530 NEXT A
540 COLOR= 2
550 HLIN 30,36 AT 43
560 PLOT 33,42
570 PLOT 33,44
580 FOR A = 1 TO 50
590 READ LIGHT(A)
600 NEXT A
610 COLOR= 5
620 VLIN 4,6 AT 20
630 COLOR= 3
640 PLOT 20,3
650 LCOUNT = 1
660 FOR X = 0 TO 22
670 READ Y
680 POKE (HM-22+X),Y
690 NEXT X
700 FOR A = 1 TO 64
710 READ S(A)
720 NEXT A
730 VAR = 31
740 GOSUB 1000
750 VAR = 63
760 GOSUB 1000
770 VAR = 31
780 GOSUB 1000
790 COL = INT(RND(1)*9)+1
800 IF COL > 2 AND COL < 6 THEN 790
810 COLOR= COL
820 PLOT 20,3
830 FOR I = 1 TO 500
840 NEXT I
850 GOTO 730
1000 FOR B = 1 TO VAR STEP 2
1010 X = S(B)
1020 Y = S(B+1)
1030 Y = 49980/Y
1040 X = X*(400-Y)*.25
1050 I = INT(X/256)
1060 J = X-256*I
1070 POKE 6,J
1080 POKE 7,I
1090 POKE 8,Y
1100 CALL HM-22
1110 IF LCOUNT < 50 THEN COLOR= INT(RND(1)*9)+1
1120 PLOT LIGHT(LCOUNT),LIGHT(LCOUNT+1)
1130 LCOUNT = LCOUNT+2
1140 IF LCOUNT >= 50 THEN LCOUNT = 1
1150 NEXT B
1160 RETURN
```

```
2000 PLOT COUNT,A
2010 FOR C = 1 TO INC
2020 PLOT COUNT+C,A
2030 NEXT C
2040 A = HOLD+1
2050 RETURN
3000 DATA 8,19,21,35,11,3,5,38,11,7,10,37,5,8,8,37,2
3010 DATA 12,17,39,9,24,28,36,1,30,36,42,-1,-1,-1,-1
3020 DATA 4,38,4,39,3,40,4,40,5,40,3,41,4,41,5,41,3
3030 DATA 42,4,42,5,42,4,43,4,44,40,42,44,39,41,43,21
3040 DATA 9,24,20,21,11,19,11,24,15,21,16,16,21,26,34
3050 DATA 8,33,30,26,19,22,17,16,32,33,10,27,25,25,21
3060 DATA 26,14,24,18,29,32,31,13,33,16,31,29,30,15
3070 DATA 27,27,30,8,30,230,7,166,6,164,8,173,48,192
3080 DATA 234,234,234,136,208,250,202,208,242,198,7
3090 DATA 208,238,96,2,196,3,262,1,262,4,262,4,294,3
3100 DATA 330,1,330,6,330,2,330,2,294,2,330,4,349,3
3110 DATA 247,4,292,4,262,2,49980,2,392,2,393,2,330,6
3120 DATA 440,2,394,2,392,2,349,6,349,2,349,2,349,2
3130 DATA 294,6,392,2,349,2,349,2,330,4,330
```

Atari/*Christmas Tree*

```
10 GRAPHICS 11
20 READ C,X,Y,Z,D,F
30 COLOR C
40 PLOT X,Z
50 DRAWTO Y,Z
60 X=X-D
70 Y=Y+D
80 Z=Z+1
90 IF Z=F THEN 110
100 GOTO 40
110 READ C,X,Y,Z,F,S
120 IF X=-1 THEN 190
130 COLOR C
140 PLOT X,Z
150 DRAWTO Y,Z
160 Z=Z+S
170 IF Z>F-3 THEN 110
180 GOTO 140
190 READ P,D,X,Z
200 IF P=-1 THEN 310
210 FOR T=1 TO D STEP 2.5
220 SOUND 2,P,10,15
230 NEXT T
240 SOUND 2,0,10,0
250 C=INT(RND(1)*9)+1
260 IF C=7 THEN 250
270 COLOR C
280 PLOT X,Z
290 DRAWTO X,Z+2
300 GOTO 190
310 RESTORE 2000
320 GOTO 190
1000 DATA 12,40,40,8,.15,158,1,38,42,158,191
1010 DATA 1,4,19,34,169,191,1,7,52,60,169,191
1020 DATA 1,6,44,50,176,191,2,8,19,34,179,183
```

```
1030 DATA 1,8,25,26,169,191,1,14,25,26,165,170
1040 DATA 1,3,46,47,171,177,1,11,46,47,176,191
1050 DATA 1,2,52,60,175,178,1,2,52,60,180,184
1060 DATA 1,2,55,55,169,191,1,6,52,60,176,183
1070 DATA 1,-1,-1,-1,-1,-1,-2
2000 DATA 108,125,48,148,81,187,54,135,81,63
2010 DATA 29,106,81,375,42,42,72,125,27,149,64
2020 DATA 125,26,129,64,63,41,106,64,375,47,82
2030 DATA 64,125,38,37,72,125,50,124,64,125,43
2040 DATA 140,60,250,34,119,85,250,32,89,72
2050 DATA 250,37,100,81,250,39,69,0,125,31,140
2060 DATA 108,125,36,147,81,187,45,116,81,63
2070 DATA 39,130,81,375,43,77,72,125,35,62,64
2080 DATA 187,50,124,64,63,43,140,64,250,34
2090 DATA 119,64,125,32,89,72,125,48,148,64
2100 DATA 125,54,135,60,250,29,106,85,250,42
2110 DATA 42,72,250,26,129,81,259,41,106,0,125
2120 DATA 47,82,53,125,38,37,53,125,37,100,64
2130 DATA 125,39,69,48,375,31,140,53,125,36
2140 DATA 147,53,125,45,116,60,125,39,130,60
2150 DATA 375,43,77,60,125,35,62,60,125,50,124
2160 DATA 72,125,43,140,53,375,34,119,60,125
2170 DATA 32,89,60,125,48,148,64,125,54,135,64
2180 DATA 250,29,106,108,250,27,149,81,187,26
2190 DATA 129,81,63,41,106,81,250,47,82,72,250
2200 DATA 38,37,64,125,37,100,64,63,39,69,64
2210 DATA 375,31,141,64,125,36,147,72,125,45
2220 DATA 116,64,125,39,130,60,250,43,77,85
2230 DATA 250,35,62,72,250,50,124,81,250,50
2240 DATA 124,0,250,40,5,-1,-1,-1,-1
3000 DATA 39,130,81,375,43,77,72,125,35,62,64
3010 DATA 125,26,129,64,63,41,106,64,375,47,82
3020 DATA 47,82,53,125,38,37,53,125,37,100,64
```

Note: This program will not work on older Atari 400s.

Commodore 64/*Christmas Tree*

```
10 PRINT CHR$(147)
20 POKE 53280,0
30 POKE 53281,0
40 READ B,CH,CO
50 IF B=-2 THEN 140
60 FOR Z=1 TO B
70 READ X,Y
80 FOR P=X+1000 TO Y+1000
90 POKE P,CH
100 POKE P+54272,CO
110 NEXT P
120 NEXT Z
130 GOTO 40
140 RESTORE
150 READ X,Y,Z
160 IF Z <> -2 THEN 150
170 V=54296
180 W=54276
190 A=54277
200 HF=54273
```

```
210 LF=54272
220 S=54278
230 PH=54275
240 PL=54274
250 POKE V,15
260 POKE W,17
270 POKE A,190
280 POKE PH,15
290 POKE PL,15
300 READ H,L,D,P
310 IF H=-1 THEN 140
320 POKE HF,H
330 POKE LF,L
340 FOR X=D-50 TO D-20
350 POKE S,136
360 NEXT X
370 FOR T=1 TO D/5
380 NEXT
390 POKE HF,0
400 POKE LF,0
410 POKE W,0
420 P=P+1000
430 POKE P,81
440 CO=INT(RND(1)*9)+2
450 IF CO=PEEK(P+54272) OR CO=3 OR CO=5 THEN 440
460 POKE P+54272,CO
470 GOTO 250
1000 DATA 20,160,5,83,83,122,124,161,165,201
1010 DATA 205,240,246,279,287,318,328,358,368
1020 DATA 397,409,436,450,475,491,515,531
1030 DATA 554,572,593,613,632,654,672,694
1040 DATA 711,735,750,776,789,817,828,858
1050 DATA 4,160,9,882,884,922,924,962,964
1060 DATA 1002,1004,2,160,6,952,954,992,994
1070 DATA 2,102,8,953,953,993,993,1,38,10
1080 DATA 913,913,2,160,7,916,920,996,1000
1090 DATA 3,160,4,918,918,956,960,998,998,1
1100 DATA 83,2,958,958,3,219,14,927,934,967
1110 DATA 974,1007,1014,1,0,5,972,972,-2,-2
1120 DATA -2,38,126,125,203,51,97,187,565,51
1130 DATA 97,62,857,51,97,375,805,57,172,250
1140 DATA 716,64,188,187,751,64,188,62,842,64
1150 DATA 188,375,285,64,188,125,854,57,172
1160 DATA 125,321,64,188,125,727,68,149,375
1170 DATA 837,48,127,375,405,57,172,250,849
1180 DATA 51,97,250,673,0,0,125,794,38,126
1190 DATA 125,638,51,97,187,449,51,97,62,830
1200 DATA 51,97,375,521,57,172,125,774,64,188
1210 DATA 187,683,64,188,62,731,64,188,250
1220 DATA 555,64,188,125,760,57,172,125,438
1230 DATA 64,188,125,609,68,149,250,805,48
1240 DATA 127,250,794,57,172,250,760,51,97
1250 DATA 250,555,0,0,125,731,76,252,125,683
1260 DATA 76,252,125,774,64,188,125,521,86
1270 DATA 105,375,830,76,252,125,449,76,252
1280 DATA 125,683,68,149,125,794,68,149,375
1290 DATA 673,68,149,125,849,68,149,125,405
1300 DATA 57,172,125,837,76,252,375,727,68
```

```
131Ø DATA 149,125,837,68,149,125,2Ø3,64,188
132Ø DATA 125,565,64,188,25Ø,857,38,126,25Ø
133Ø DATA 8Ø5,51,97,187,716,51,97,125,751
134Ø DATA 51,97,25Ø,774,57,172,25Ø,521,64
135Ø DATA 188,125,83Ø,64,188,62,449,64,188
136Ø DATA 375,716,64,188,125,751,57,172,125
137Ø DATA 731,64,188,125,849,68,149,25Ø,2Ø3
138Ø DATA 48,127,25Ø,683,57,172,25Ø,555,51
139Ø DATA 97,25Ø,43,Ø,Ø,25Ø,43,-1,-1,-1,-1
```

IBM PCs/*Christmas Tree*

```
1Ø DIM MU(48,2),LI(19,2)
2Ø FOR I=1 TO 48
3Ø READ MU(I,1),MU(I,2)
4Ø NEXT I
5Ø FOR I=1 TO 19
6Ø READ LI(I,1),LI(I,2)
7Ø NEXT I
8Ø KEY OFF
9Ø CLS
1ØØ L=1
11Ø T=4Ø
12Ø FOR N=1 TO 18
13Ø A$=STRING$(L,219)
14Ø PRINT TAB(T);A$
15Ø L=L+2
16Ø T=T-1
17Ø NEXT N
18Ø A$=STRING$(3,219)
19Ø FOR B=1 TO 5
2ØØ PRINT TAB(39);A$
21Ø NEXT B
22Ø LOCATE 21,24
23Ø A$=STRING$(5,177)
24Ø PRINT A$
25Ø PRINT TAB(24);A$
26Ø PRINT TAB(24);A$
27Ø LOCATE 22,3Ø
28Ø A$=STRING$(8,176)
29Ø PRINT A$
3ØØ LOCATE 23,3Ø
31Ø PRINT A$
32Ø LOCATE 21,33
33Ø PRINT CHR$(145)
34Ø LOCATE 2Ø,44
35Ø A$=STRING$(12,178)
36Ø PRINT A$
37Ø LOCATE 21,44
38Ø PRINT A$
39Ø LOCATE 22,44
4ØØ PRINT A$
41Ø LOCATE 23,44
42Ø PRINT A$
43Ø LOCATE 21,49
44Ø COLOR Ø,7
45Ø PRINT CHR$(21)
46Ø COLOR 7,Ø
```

```
470 CT=1
480 LM=24
490 GOSUB 1000
500 LM=48
510 GOSUB 1000
520 LM=24
530 GOSUB 1000
540 LOCATE 1,40
550 PRINT CHR$(186)
560 GOTO 480
1000 FOR I=1 TO LM
1010 SOUND MU(I,1),MU(I,2)
1020 LOCATE LI(CT,1),LI(CT,2)
1030 CT=CT+1
1040 IF CT>19 THEN CT=1
1050 IF RND(1)<.2 THEN PRINT CHR$(219) ELSE PRINT CHR$(2)
1060 NEXT I
1070 RETURN
2000 DATA 293,6,392,6,392,6,392,6,32767,6
2010 DATA 440,6,32767,6,493,6,493,6,493,6
2020 DATA 32767,6,32767,6,493,6,440,6,493,6
2030 DATA 523,6,32767,6,369,6,32767,6,440,6
2040 DATA 32767,6,392,6,32767,6,32767,6
2050 DATA 587,6,587,6,493,6,659,6,32767,6
2060 DATA 32767,6,587,6,587,6,523,6,523,6
2070 DATA 32767,6,32767,6,523,6,523,6,440,6
2080 DATA 587,6,32767,6,32767,6,523,6,523,6
2090 DATA 493,6,493,6,32767,6,32767,6
2100 DATA 3,40,5,38,5,42,7,42,8,38,9,40,9,34
2110 DATA 10,44,11,38,11,46,12,35,12,49,13,41
2120 DATA 16,35,16,44,16,53,17,43,17,42,17,51
```

TI-99/4A/*Christmas Tree*

```
10 CALL CLEAR
20 CALL SCREEN(2)
30 A$="FF00FF00FF00FF00"
40 CALL CHAR(128,A$)
50 READ CS,CHAR,F,B
60 IF CS=-1 THEN 140
70 CALL COLOR(CS,F,B)
80 READ X,Y
90 FOR ROW=X TO Y
100 READ COL,REP
110 CALL HCHAR(ROW,COL,CHAR,REP)
120 NEXT ROW
130 GOTO 50
140 RESTORE 2000
150 READ DUR,FRE,ROW,COL
160 IF DUR=-2 THEN 140
170 CALL SOUND(DUR,FRE,0)
180 CO=INT(RND*12)+2
190 IF CO=13 THEN 180
200 CALL COLOR(3,CO,3)
210 CALL HCHAR(ROW,COL,48)
220 GOTO 150
1000 DATA 11,113,3,3,3,19,16,1,15,3,15,3
1010 DATA 14,5,13,7,13,7,12,9,11,11,11,11
```

```
1020 DATA 10,13,9,15,9,15,8,17,7,19,7,19,6,21
1030 DATA 5,23,12,120,11,11,20,24,16,1,16
1040 DATA 1,16,1,16,1,16,1,9,96,6,6,22,24
1050 DATA 6,9,6,9,6,9,5,64,12,1,21,21,10,1
1060 DATA 2,43,12,10,22,24,10,1,6,9,10,1
1070 DATA 8,91,14,16,23,24,18,3,18,3,4,56
1080 DATA 8,1,22,22,19,1,13,128,9,16,21,24
1090 DATA 22,5,22,5,22,5,22,5,7,80,7,7,21
1100 DATA 24,24,1,22,5,24,1,24,1,10,111,7
1110 DATA 1,22,22,24,1,-1,-1,-1,-1
2000 DATA 125,294,15,18,187,392,6,15,63,392,19,18,375
2010 DATA 392,12,11,125,440,17,22,187,494,9,13,63,494
2020 DATA 18,15,375,494,16,12,125,494,19,6,125,440,19
2030 DATA 25,125,494,7,17,250,523,11,17,250,370,13,20
2040 DATA 250,440,10,20,250,392,15,23,125,30000,9,13
2050 DATA 125,294,19,10,187,392,13,14,63,392,15,18
2060 DATA 375,392,7,17,125,440,16,12,187,494,6,15,63
2070 DATA 494,19,18,250,494,12,11,125,494,17,22,125
2080 DATA 440,9,13,125,494,15,10,250,523,16,12,250
2090 DATA 370,19,6,250,440,19,25,250,392,7,17,125
2100 DATA 30000,12,11,125,587,13,20,125,587,10,20
2110 DATA 125,494,15,23,375,659,17,8,125,587,19,10
2120 DATA 125,587,18,15,125,523,15,18,375,523,7,17
2130 DATA 125,523,16,12,125,523,6,15,125,440,19,18
2140 DATA 375,587,12,11,125,523,17,22,125,523,9,13
2150 DATA 125,494,15,10,250,494,16,12,250,294,19,6
2160 DATA 375,392,13,14,63,392,7,17,250,392,11,17
2170 DATA 250,440,13,20,125,494,10,20,63,494,15,23
2180 DATA 375,494,17,8,125,494,19,10,125,440,18,15,125
2190 DATA 494,15,18,250,523,7,17,250,370,7,17,250,440
2200 DATA 6,15,250,392,13,14,250,30000,3,16
2210 DATA -2,-2,-2,-2
```

Timex Sinclair 1000 w/16K RAM Pack & Timex Sinclair 1500/
Christmas Tree

```
10 DIM A$(25)
20 DIM B$(2,5)
30 DIM C$(2,3)
40 FOR N=1 TO 25
50 LET A$(N)=CHR$ 128
60 NEXT N
70 LET B$(1)=CHR$ 128+CHR$ 128+CHR$ 136+CHR$ 128+CHR$
128
80 FOR N=1 TO 5
90 LET B$(2,N)=CHR$ 136
100 NEXT N
110 LET C$(1)=CHR$ 128+CHR$ 136+CHR$ 128
120 LET C$(2)=B$(2, TO 3)
130 PRINT TAB 15;A$( TO 1)
140 PRINT TAB 14;A$( TO 3)
150 PRINT TAB 13;A$( TO 5)
160 PRINT TAB 13;A$( TO 5)
170 PRINT TAB 12;A$( TO 7)
180 PRINT TAB 11;A$( TO 9)
190 PRINT TAB 10;A$( TO 11)
200 PRINT TAB 10;A$( TO 11)
210 PRINT TAB 9;A$( TO 13)
```

```
220 PRINT TAB 8;A$( TO 15)
230 PRINT TAB 7;A$( TO 17)
240 PRINT TAB 7;A$( TO 17)
250 PRINT TAB 7;A$( TO 17)
260 PRINT TAB 6;A$( TO 19)
270 PRINT TAB 5;A$( TO 21)
280 PRINT TAB 4;A$( TO 23)
290 PRINT TAB 3;A$
300 FOR N=1 TO 5
310 PRINT TAB 14;A$( TO 3)
320 NEXT N
330 PRINT AT 18,4;B$(1);AT 19,4;B$(2)
340 PRINT AT 20,4;B$(1);AT 21,4;B$(1)
350 PRINT AT 18,10;C$(1);AT 19,10;C$(1)
360 PRINT AT 20,10;C$(2);AT 21,10;C$(1)
370 PRINT AT 19,18;C$(1);AT 20,18;C$(2)
380 PRINT AT 21,18;C$(1);AT 19,22;A$( TO 5)
390 PRINT AT 20,22;B$(2);AT 21,22;A$( TO 5)
400 UNPLOT 35,33
410 UNPLOT 27,30
420 UNPLOT 24,23
430 UNPLOT 16,17
440 PRINT AT 0,15;CHR$ 138
450 UNPLOT 38,29
460 UNPLOT 22,28
470 UNPLOT 25,28
480 PRINT AT 0,15;CHR$ 131
490 UNPLOT 31,28
500 UNPLOT 37,26
510 UNPLOT 19,23
520 PRINT AT 0,15;CHR$ 138
530 UNPLOT 29,22
540 UNPLOT 39,22
550 UNPLOT 20,16
560 PRINT AT 0,15;CHR$ 131
570 UNPLOT 28,16
580 UNPLOT 34,17
590 UNPLOT 42,16
600 PRINT AT 0,15;CHR$ 138
610 UNPLOT 21,13
620 UNPLOT 29,36
630 PLOT 25,28
640 PRINT AT 0,15;CHR$ 131
650 PLOT 38,29
660 PLOT 19,23
670 PLOT 29,22
680 PRINT AT 0,15;CHR$ 138
690 PLOT 39,22
700 PLOT 31,28
710 PLOT 22,28
720 PRINT AT 0,15;CHR$ 131
730 PLOT 37,26
740 PLOT 29,36
750 GOTO 440
```

TRS-80 Color Computer/*Christmas Tree*

```
10 CLS(0)
20 V=1
30 L=31
40 R=31
50 FOR H=L TO R
60 IF V>23 THEN 130
70 SET(H,V,1)
80 NEXT H
90 V=V+1
100 L=L-1
110 R=R+1
120 GOTO 50
130 READ U,D,L,R,CO
140 IF U=-2 THEN 220
150 V=U
160 FOR H=L TO R
170 SET(H,V,CO)
180 NEXT H
190 V=V+1
200 IF V>D THEN 130
210 GOTO 160
220 RESTORE
230 READ DUM
240 IF DUM<>-1 THEN 230
250 CO=RND(7)+1
260 IF CO=1 THEN 250
270 READ N,D,H,V
280 IF H=-1 THEN 220
290 SET(H,V,CO)
300 SOUND N,D/16
310 GOTO 250
1000 DATA 24,31,30,32,2,26,31,11,17,8,29,29
1010 DATA 11,17,4,27,31,15,15,4,27,31,22,27
1020 DATA 6,27,31,24,24,7,29,29,22,27,7,29
1030 DATA 29,24,24,3,27,31,37,51,4,29,29
1040 DATA 37,51,1,27,31,46,46,3,29,29,46
1050 DATA 46,8,-2,-2,-2,-2,-2,-1
1060 DATA 108,125,32,4,147,187,43,19,147
1070 DATA 63,22,15,147,375,48,22,159,125
1080 DATA 19,19,170,187,36,9,170,63,24
1090 DATA 22,170,375,38,16,170,125,28,7
1100 DATA 159,125,31,13,179,125,31,19,176
1110 DATA 250,36,22,140,250,25,10,159,250
1120 DATA 12,22,147,250,39,12,255,125,32
1130 DATA 4,108,125,43,19,147,187,22,15,147
1140 DATA 63,48,22,147,375,19,19,159,125,36
1150 DATA 9,170,187,24,22,170,63,38,16,170
1160 DATA 250,28,7,170,125,31,13,159,125,31
1170 DATA 19,170,125,36,22,176,250,25,10,140
1180 DATA 250,12,22,159,250,39,12,147,250,25
1190 DATA 10,255,125,12,22,185,125,39,12
1200 DATA 185,125,32,4,170,125,43,19,193
1210 DATA 375,22,15,185,125,48,22,185,125
1220 DATA 19,19,176,125,36,9,176,375,24,22
1230 DATA 176,125,38,16,176,125,28,7,159,125
1240 DATA 31,13,185,375,31,19,176,125,36,22
1250 DATA 176,125,32,4,170,125,43,19,170,250
```

```
126Ø DATA 22,15,1Ø8,25Ø,48,22,147,187,19,19
127Ø DATA 147,63,36,9,147,25Ø,24,22,159,25Ø
128Ø DATA 38,16,17Ø,126,28,7,17Ø,63,31,13
129Ø DATA 17Ø,375,31,19,17Ø,125,36,22,159
13ØØ DATA 125,25,1Ø,17Ø,125,12,22,176,25Ø
131Ø DATA 39,12,14Ø,25Ø,32,4,159,25Ø,43,19
132Ø DATA 147,25Ø,22,15,255,25Ø,31,1
133Ø DATA -1,-1,-1,-1
```

TRS-80 Model III/*Christmas Tree*

```
1Ø CLS
2Ø X=1
3Ø X1=63
4Ø X2=63
5Ø Y=2
6Ø FOR Z=X1 TO X2
7Ø SET(Z,Y)
8Ø NEXT Z
9Ø X=X+1
1ØØ X1=X1-1
11Ø X2=X2+1
12Ø Y=Y+1
13Ø IF X<>39 THEN 6Ø
14Ø READ X1,X2,Y1,Y2
15Ø IF X1=-1 THEN 21Ø
16Ø FOR Z=X1 TO X2
17Ø SET(Z,Y1)
18Ø NEXT Z
19Ø Y1=Y1+1
2ØØ IF Y1>Y2 THEN 14Ø ELSE 16Ø
21Ø READ X1,X2,Y
22Ø IF X1=-1 THEN 27Ø
23Ø FOR Z=X1 TO X2
24Ø RESET(Z,Y)
25Ø NEXT Z
26Ø GOTO 21Ø
27Ø READ X1,X2,Y
28Ø IF X1=-1 THEN 34Ø
29Ø FOR Z=X1 TO X2
3ØØ RESET(Z,Y)
31Ø NEXT Z
32Ø Y=Y+1
33Ø IF Y<=47 THEN 29Ø ELSE 27Ø
34Ø SET(53,42)
35Ø SET(53,43)
36Ø READ X,Y
37Ø IF X=-1 THEN 42Ø
38Ø IF POINT(X,Y) THEN RESET(X,Y) ELSE SET(X,Y)
39Ø FOR T=1 TO 25Ø
4ØØ NEXT T
41Ø GOTO 36Ø
42Ø RESTORE
43Ø READ DUM
44Ø IF DUM=-2 THEN 36Ø ELSE 43Ø
1ØØØ DATA 32,47,41,47,5Ø,57,43,47,6Ø,66,39
1Ø1Ø DATA 47,69,95,42,47,-1,-1,-1,-1,32,47
1Ø2Ø DATA 44,69,95,45,-1,-1,-1,39,4Ø,41,86
```

```
1030 DATA 87,42,-1,-1,-2,61,7,81,38,74,31
1040 DATA 58,20,63,14,87,29,51,37,94,35,45
1050 DATA 24,51,17,71,12,33,34,58,35,30,37
1060 DATA 80,27,79,20,66,9,56,11,71,36,48
1070 DATA 36,42,32,40,29,69,24,73,17,53,27
1080 DATA 63,29,82,33,98,38,66,9,87,29,61
1090 DATA 7,81,38,74,31,58,20,63,14,87,29
1100 DATA 51,37,94,35,45,24,51,17,71,12,33
1110 DATA 34,58,35,30,37,80,27,79,20,66,9
1120 DATA 56,11,71,36,42,36,48,32,40,29,69
1130 DATA 24,73,17,53,27,63,29,82,33,98,38
1140 DATA 66,9,87,29,63,2,-1,-1
```

VIC-20/*Christmas Tree*

```
10 PRINT CHR$(147)
20 POKE 36879,8
30 READ B,CH,CO
40 IF B=-2 THEN 130
50 FOR Z=1 TO B
60 READ X,Y
70 FOR P=X+7000 TO Y+7000
80 POKE P,CH
90 POKE P+30720,CO
100 NEXT P
110 NEXT Z
120 GOTO 30
130 RESTORE
140 READ X,Y,Z
150 IF Z<>-2 THEN 140
160 POKE 36878,15
170 SP=36876
180 READ S,D,P
190 IF D=-1 THEN 130
200 POKE SP,S
210 FOR T=1 TO D+50
220 NEXT T
230 POKE SP,0
240 POKE V,0
250 P=P+7000
260 POKE P,81
270 CO=INT(RND(1)*7)+1
280 IF CO=5 OR CO=PEEK(P+30720) THEN 270
290 POKE P+30720,CO
300 GOTO 160
1000 DATA 16,160,5,734,734,755,757,777,779
1010 DATA 798,802,819,825,841,847,862,870
1020 DATA 883,893,905,915,926,938,947,961
1030 DATA 969,983,990,1006,1012,1028,1033
1040 DATA 1051,1054,1074,5,160,1,1086,1086
1050 DATA 1108,1108,1130,1130,1152,1152
1060 DATA 1174,1174,2,160,7,1121,1128,1165
1070 DATA 1172,3,160,6,1124,1124,1143,1150
1080 DATA 1168,1168,1,0,1,1146,1146,2,102
1090 DATA 4,1154,1156,1176,1178,1,88,3,1133
1100 DATA 1133,2,160,4,1155,1155,1177,1177
1110 DATA 3,160,2,1114,1117,1136,1139,1180
1120 DATA 1183,4,62,5,1116,1116,1138,1138
```

```
1130 DATA 1158,1161,1182,1182,1,83,2,1160
1140 DATA 1160,-2,201,125,991,215,187,910
1150 DATA 215,63,1037,215,375,799,219,125
1160 DATA 1004,223,187,958,223,63,1068,223
1170 DATA 375,863,223,125,974,219,125,1062
1180 DATA 223,125,823,225,250,869,212,250
1190 DATA 1055,219,250,1073,215,250,928,0
1200 DATA 125,1021,201,125,991,215,187,910
1210 DATA 215,63,1037,215,375,799,219,125
1220 DATA 1004,223,187,958,223,63,1068,223
1230 DATA 250,863,223,125,974,219,125,1062
1240 DATA 223,125,823,225,250,869,212,250
1250 DATA 1055,219,250,1073,215,250,928,0
1260 DATA 125,1021,228,125,991,228,125,910
1270 DATA 223,125,1037,231,375,799,228,125
1280 DATA 1004,228,125,958,225,125,1068,225
1290 DATA 375,869,225,125,1055,225,125,2073
1300 DATA 219,125,928,228,675,1021,225,125
1310 DATA 991,225,125,910,223,125,1037,223
1320 DATA 250,799,201,250,1004,215,187,958
1330 DATA 215,63,1068,215,250,863,219,250
1340 DATA 974,223,125,1062,223,63,823,223
1350 DATA 375,869,223,125,1055,219,125,1073
1360 DATA 223,125,928,225,250,1021,212,250
1370 DATA 991,219,250,910,215,250,1037,0
1380 DATA 250,712,-1,-1,-1,-1
```

PERSONAL VALENTINE

It's Valentine's Day. Cancel the order for a dozen roses, return the chocolate hearts, and throw away the sappy cards. Turn your marvel of technology into a computing Cupid. Design a personalized message for that special someone.

ADAM/*Personal Valentine*

```
10 HOME
20 PRINT "COMPUTER VALENTINE"
30 PRINT
40 PRINT "Press <RETURN> after each reply."
50 PRINT
60 INPUT "What is your name? ";n$
70 PRINT
80 PRINT "Who is this valentine for?"
90 INPUT "(8 letters or fewer, please.)";f$
100 IF LEN(f$) > 8 THEN 90
110 GR
120 COLOR= 6
130 FOR i = 0 TO 39
140 VLIN 0,39 AT i
150 NEXT i
160 COLOR= 9
170 l = 3
180 GOSUB 2000
190 COLOR= 4
200 l = 11
210 GOSUB 2000
220 COLOR= 0
230 HLIN 12,29 AT 37
240 HLIN 12,29 AT 36
250 HLIN 3,8 AT 13
260 HLIN 33,38 AT 13
270 HLIN 18,23 AT 5
280 COLOR= 2
290 VLIN 36,37 AT 19
300 VLIN 36,37 AT 21
310 VTAB 20
320 HTAB 4
330 PRINT "My heart throbs for you,"
340 HTAB 15
350 PRINT f$;"!"
360 HTAB 19-(LEN(n$)/2)
370 PRINT "Love, ";n$
380 COLOR= INT(RND(1)*16)
390 GOSUB 1000
400 COLOR= 9
410 GOSUB 1000
420 GOTO 380
1000 HLIN 17,18 AT 10
1010 HLIN 23,24 AT 10
1020 HLIN 17,18 AT 11
1030 HLIN 23,24 AT 11
1040 HLIN 16,19 AT 12
1050 HLIN 22,25 AT 12
```

```
1060 HLIN 16,19 AT 13
1070 HLIN 22,25 AT 13
1080 HLIN 16,25 AT 14
1090 HLIN 16,25 AT 15
1100 HLIN 17,24 AT 16
1110 HLIN 17,24 AT 17
1120 HLIN 18,23 AT 18
1130 HLIN 18,23 AT 19
1140 HLIN 18,23 AT 20
1150 HLIN 18,23 AT 21
1160 HLIN 19,22 AT 22
1170 HLIN 19,22 AT 23
1180 HLIN 20,21 AT 24
1190 HLIN 20,21 AT 25
1200 RETURN
2000 FOR i = 1 TO l
2010 READ x1,y1,x2,y2
2020 FOR j = x1 TO x2
2030 VLIN y1,y2 AT j
2040 NEXT j
2050 NEXT i
2060 RETURN
3000 DATA 18,0,22,5,4,14,6,24,34,14,36,24,12,5,28,39,3
3010 DATA 11,7,13,4,9,10,11,6,7,8,0,8,6,10,9,10,5,12
3020 DATA 10,33,11,37,13,34,0,36,11,32,7,34,11,30,6,32
3030 DATA 11,28,5,30,10
```

Apple/*Personal Valentine*

```
10 HOME
20 PRINT "COMPUTER VALENTINE"
30 PRINT
40 PRINT "PRESS <RETURN> AFTER EACH REPLY."
50 PRINT
60 INPUT "WHAT IS YOUR NAME? ";N$
70 PRINT
80 PRINT "WHO IS THIS VALENTINE FOR?"
90 INPUT "(8 LETTERS OR FEWER, PLEASE) ";F$
100 IF LEN(F$) > 8 THEN 90
110 GR
120 COLOR= 6
130 FOR I = 0 TO 39
140 VLIN 0,39 AT I
150 NEXT I
160 COLOR= 9
170 L = 3
180 GOSUB 2000
190 COLOR= 4
200 L = 11
210 GOSUB 2000
220 COLOR= 0
230 HLIN 12,28 AT 37
240 HLIN 12,28 AT 36
250 HLIN 2,6 AT 14
260 HLIN 34,38 AT 14
270 HLIN 18,22 AT 5
280 COLOR= 2
290 VLIN 36,37 AT 19
```

```
300 VLIN 36,37 AT 21
310 VTAB 23
320 FLASH
330 HTAB 8-(LEN(F$)/2)
340 PRINT "MY HEART THROBS FOR YOU, ";F$;"!"
350 PRINT
360 HTAB 19-(LEN(N$)/2):PRINT "LOVE, ";N$
370 COLOR= INT(RND(1)*16)
380 GOSUB 1000
390 COLOR= 9
400 GOSUB 1000
410 GOTO 370
1000 HLIN 17,18 AT 10
1010 HLIN 23,24 AT 10
1020 HLIN 17,18 AT 11
1030 HLIN 23,24 AT 11
1040 HLIN 16,19 AT 12
1050 HLIN 22,25 AT 12
1060 HLIN 16,19 AT 13
1070 HLIN 22,25 AT 13
1080 HLIN 16,25 AT 14
1090 HLIN 16,25 AT 15
1100 HLIN 17,24 AT 16
1110 HLIN 17,24 AT 17
1120 HLIN 18,23 AT 18
1130 HLIN 18,23 AT 19
1140 HLIN 18,23 AT 20
1150 HLIN 18,23 AT 21
1160 HLIN 19,22 AT 22
1170 HLIN 19,22 AT 23
1180 HLIN 20,21 AT 24
1190 HLIN 20,21 AT 25
1200 RETURN
2000 FOR I = 1 TO L
2010 READ X1,Y1,X2,Y2
2020 FOR J = X1 TO X2
2030 VLIN Y1,Y2 AT J
2040 NEXT J
2050 NEXT I
2060 RETURN
3000 DATA 18,0,22,5,2,14,6,24,34,14,38,24,12,5,28,39
3010 DATA 3,11,7,13,4,9,10,11,6,7,8,9,8,6,10,9,10,5
3020 DATA 12,10,33,11,37,13,34,9,36,11,32,7,34,11,30
3030 DATA 6,32,11,28,5,30,10
```

Atari/*Personal Valentine*

```
10 DIM F$(8),N$(9)
20 PRINT CHR$(125)
30 PRINT "COMPUTER VALENTINE"
40 PRINT
50 PRINT "PRESS <RETURN> AFTER EACH REPLY."
60 PRINT
70 PRINT "WHAT IS YOUR FIRST NAME"
80 PRINT "(8 LETTERS OR FEWER, PLEASE)"
90 INPUT N$
100 PRINT
110 PRINT "WHO IS THIS VALENTINE FOR"
```

```
120 INPUT F$
130 PRINT CHR$(125)
140 GRAPHICS 3
150 SETCOLOR 4,3,10
160 SETCOLOR 1,1,8
170 SETCOLOR 4,3,10
180 READ A,B,X,Y,KO
190 IF A=-1 THEN 250
200 COLOR KO
210 FOR RO=A TO B
220 PLOT X,RO:DRAWTO Y,RO
230 NEXT RO
240 GOTO 180
250 READ B,KO
260 HO=BA
270 COLOR KO
280 FOR A=1 TO B
290 READ X,Y,Z
300 IF X=-1 THEN 340
310 PLOT X,Y:DRAWTO Z,Y
320 NEXT A
330 GOTO 250
340 POKE 752,1
350 PRINT
360 PRINT F$;","
370 PRINT "      MY HEART THROBS FOR YOU!"
380 PRINT ,,"LOVE, ";N$;
390 HO=BA
400 BA=INT(RND(1)*15)+1
410 IF BA=11 THEN 390
420 IF BA=HO THEN 390
430 SETCOLOR 4,BA,10
440 SOUND 3,35,8,10
450 FOR D=1 TO 75
460 NEXT D
470 SOUND 3,0,0,0
480 Z=Z+1
490 FOR D=1 TO 75
500 NEXT D
510 GOTO 390
1000 DATA 0,19,0,16,3,0,19,26,39,3,0,1,24,25,3,13,19
1010 DATA 8,11,2,13,19,29,32,2,0,1,17,23,2,-1,-1,-1
1020 DATA -1,-1,35,1,12,2,28,24,2,28,10,3,30,9,4,17
1030 DATA 25,4,31,21,4,21,8,5,16,26,5,32,8,6,16,26,6
1040 DATA 32,7,7,16,26,7,33,7,8,17,25,8,33,7,9,18
1050 DATA 24,9,33,7,10,12,14,10,19,23,10,26,28,10,33
1060 DATA 7,11,12,14,11,20,22,11,26,28,11,33,7,12,12
1070 DATA 14,12,26,28,12,33,14,13,26,14,14,26,14,15
1080 DATA 26,14,16,26,14,17,26,14,18,26,14,19,26
1090 DATA -1,-1,-1
```

Commodore 64/*Personal Valentine*

```
10 PRINT CHR$(147)
20 PRINT "COMPUTER VALENTINE"
30 PRINT
40 PRINT "PRESS <RETURN> AFTER EACH REPLY."
50 PRINT
```

```
60 INPUT "WHAT IS YOUR NAME";N$
70 PRINT
80 PRINT "WHO IS THIS VALENTINE FOR"
90 INPUT "(8 LETTERS OR FEWER, PLEASE)";F$
100 IF LEN(F$)>8 THEN 90
110 PRINT CHR$(147)
120 SB=1024
130 CB=55296
140 POKE 53281,2
150 POKE 53280,1
160 READ A,B,X,Y,KO
170 IF A=-1 THEN 250
180 FOR CO=A TO B
190 FOR RO=X TO Y
200 POKE CB+CO+40*RO,KO
210 POKE SB+CO+40*RO,CH
220 NEXT RO
230 NEXT CO
240 GOTO 160
250 READ A,B,KO,CH
260 IF A=-1 THEN 350
270 FOR CO=A TO B
280 READ X,Y
290 FOR RO=X TO Y
300 POKE CB+CO+40*RO,KO
310 POKE SB+CO+40*RO,CH
320 NEXT RO
330 NEXT CO
340 GOTO 250
350 PRINT CHR$(19);CHR$(5)
360 FOR T=1 TO 6
370 PRINT
380 NEXT T
390 Q=8-LEN(F$)
400 PRINT TAB(16+Q/2);F$
410 FOR T=1 TO 11
420 PRINT
430 NEXT T
440 PRINT CHR$(18);TAB(18);LEFT$(N$,1)
450 FOR T=1 TO 3
460 PRINT
470 NEXT T
480 PRINT CHR$(18);TAB(7);"MY HEART THROBS FOR YOU"
490 BA=INT(RND(1)*5)+4
500 IF BA=PEEK(53281) THEN 490
510 IF Z/2=INT(Z/2) THEN BA=2
520 POKE 53281,BA
530 S=54272
540 FOR X=1 TO 23
550 POKE S+X,0
560 NEXT X
570 POKE S,1
580 POKE S+1,5
590 POKE S+24,12
600 POKE S+5,16+8
610 POKE S+4,129
620 POKE S+6,20
630 FOR T=1 TO 300
```

```
640 NEXT T
650 Z=Z+1
660 GOTO 490
1000 DATA 0,39,21,24,1,0,14,0,20,6,24,39,0,20,6,21,25
1010 DATA 1,1,6,20,23,0,0,6,15,21,0,0,9,15,21,1,1,9,6
1020 DATA 9,13,20,9,27,30,13,20,9,12,24,19,19,0,12,24
1030 DATA 20,20,12,5,10,12,12,10,26,31,12,12,10,15,21
1040 DATA 2,2,10,-1,-1,-1,-1,-1
2000 DATA 5,31,13,86,7,11,5,11,4,11,3,11,3,11,2,11,2,9
2010 DATA 2,18,2,18,2,18,3,4,3,3,3,3,3,3,3,4,3,3,3,3,2
2020 DATA 3,2,4,2,18,2,9,3,11,3,11,4,11,5,11,5,11,7,11
2030 DATA 15,23,13,86,8,18,9,18,10,18,11,18,12,18,11
2040 DATA 18,10,18,9,18,8,18,-1,-1,-1,-1,15,22,14,22
2050 DATA 13,22,12,22,-1,-1,-1,-1
```

IBM PC w/Color Graphics Adapter & Advanced BASIC & IBM PC*jr* w/Cartridge BASIC/*Personal Valentine*

```
10 KEY OFF
20 CLS
30 PRINT "COMPUTER VALENTINE"
40 PRINT
50 PRINT "PRESS <ENTER> AFTER EACH REPLY."
60 PRINT
70 INPUT "WHAT IS YOUR NAME";N$
80 PRINT
90 PRINT "WHO IS THIS VALENTINE FOR"
100 INPUT "(8 LETTERS OR FEWER, PLEASE)";F$
110 IF LEN(F$)>8 THEN 100
120 CLS
130 SCREEN 1,0
140 COLOR 1,0
150 PI=3.141593
160 L=2
170 C=3
180 CIRCLE (150,20),20,C,,,1.25
190 PAINT (150,20),C
200 GOSUB 1000
210 L=1
220 C=1
230 GOSUB 1000
240 FOR I=1 TO 2
250 READ C1,X1,X2,STARTANG,ENDANG,PX,PY
260 CIRCLE (C1,90),30,C,STARTANG,ENDANG
270 CIRCLE (C1,90),54,C,STARTANG,ENDANG
280 LINE (X1,90)-(X2,90),C
290 PAINT (PX,PY),C,C
300 NEXT I
310 L=4
320 C=2
330 GOSUB 1000
340 LOCATE 21,8-(LEN(F$)/2)
350 PRINT "MY HEART THROBS FOR YOU, ";F$;"!"
360 LOCATE 22,17-(LEN(N$)/2)
370 PRINT "LOVE, ";N$
380 CIRCLE (150,60),10,3,2*PI,PI+.1
390 CIRCLE (170,60),10,3,2*PI,PI
400 LINE (140,60)-(160,90),3
410 LINE (160,90)-(180,60),3
```

```
420 C=C+1
430 PAINT (150,55),C MOD 2 + 1,3
440 FOR P=1 TO 125
450 NEXT P
460 IF INKEY$=CHR$(27) THEN END
470 GOTO 420
1000 FOR I=1 TO L
1010 READ X1,Y1,X2,Y2
1020 LINE (X1,Y1)-(X2,Y2),C,BF
1030 NEXT I
1040 RETURN
2000 DATA 56,91,80,114,220,91,244,114,110,45,190,150
2010 DATA 110,56,80,1.57,3.14,80,85,190,220,244,6.28
2020 DATA 1.57,220,85,140,44,160,41,56,83,81,86,219
2030 DATA 83,244,86,110,136,190,140
```

TI-99/4A/*Personal Valentine*

```
10 A$="8142241818244281"
20 B$="FFFFFFFFFFFFFFFF"
30 CALL CHAR(128,B$)
40 CALL CHAR(136,B$)
50 CALL CHAR(144,A$)
60 CALL COLOR(12,13,16)
70 CALL COLOR(13,11,11)
80 CALL COLOR(14,7,7)
90 CALL COLOR(15,3,8)
100 CALL CLEAR
110 PRINT "COMPUTER VALENTINE"
120 PRINT
130 PRINT "PRESS <ENTER> AFTER"
140 PRINT "EACH REPLY."
150 PRINT
160 PRINT "WHAT IS YOUR FIRST NAME?"
170 PRINT "(7 LETTERS OR FEWER)"
180 INPUT N$
190 IF LEN(N$)>7 THEN 170
200 PRINT
210 PRINT "WHO IS THE VALENTINE FOR?"
220 INPUT F$
230 CALL CLEAR
240 PRINT F$
250 PRINT TAB(10);"MY HEART"
260 PRINT TAB(7);"THROBS FOR YOU"
270 PRINT TAB(22);N$;
280 CALL SCREEN(9)
290 READ CH,A,B
300 IF CH=-1 THEN 360
310 FOR CO=A TO B
320 READ RO,REP
330 CALL VCHAR(RO,CO,CH,REP)
340 NEXT CO
350 GOTO 290
360 HO=KO
370 KO=INT(RND*13)+2
380 IF KO=HO THEN 370
390 CALL COLOR(14,KO,KO)
400 CALL SOUND(500,-8,0)
```

```
410 GOTO 360
1000 DATA 128,4,7,14,7,14,7,14,7,14,7
1010 DATA 128,25,28,14,7,14,7,14,7,14,7
1020 DATA 128,13,19,1,2,1,2,1,2,1,2,1,2,1,2,1,2
1030 DATA 144,3,29,8,5,6,7,5,8,4,9,4,9,3,10
1040 DATA 3,8,3,18,3,18,3,18,3,18,3,18,3,18
1050 DATA 3,18,3,18,3,18,3,18,3,18,3,18,3,18
1060 DATA 3,8,3,10,4,9,4,9,5,8,6,7,8,5
1070 DATA 136,13,21,6,2,5,4,5,5,5,6,6,6,5,6
1080 DATA 5,5,5,4,6,2
1090 DATA 120,3,8,13,1,13,1,13,1,13,1,13,1,13,1
1100 DATA 120,24,29,13,1,13,1,13,1,13,1,13,1,13,1
1110 DATA 120,13,19,3,1,3,1,3,1,3,1,3,1,3,1,3,1
1120 DATA -1,-1,-1
```

Timex Sinclair 1000 w/16K RAM Pack & Timex Sinclair 1500/ *Personal Valentine*

```
10 CLS
20 SLOW
30 PRINT "COMPUTER VALENTINE"
40 PRINT
50 PRINT "PRESS <ENTER> AFTER EACH REPLY."
60 PRINT
70 PRINT "WHAT IS YOUR NAME?"
80 INPUT N$
90 PRINT
100 PRINT "WHO IS THIS VALENTINE FOR?"
110 PRINT "(7 LETTERS OR FEWER, PLEASE.)"
120 INPUT F$
130 IF LEN F$>7 THEN GOTO 120
140 CLS
150 FAST
160 FOR L=0 TO 3
170 PRINT TAB 12;CHR$ 5;TAB 18;CHR$ 133
180 NEXT L
190 FOR L=12 TO 20
200 PRINT AT L,2;CHR$ 133;TAB 6;CHR$ 5;TAB 24;CHR$ 133
;TAB 28;CHR$ 5
210 NEXT L
220 FOR L=4 TO 26
230 PRINT AT 3,L;CHR$ 136
240 NEXT L
250 FOR L=3 TO 27
260 PRINT AT 4,L;CHR$ 136
270 NEXT L
280 FOR L=2 TO 28
290 PRINT AT 5,L;CHR$ 136;AT 6,L;CHR$ 136
300 NEXT L
310 FOR L=7 TO 11
320 PRINT AT L,2;CHR$ 136;AT L,3;CHR$ 136;AT L,4;CHR$
136
330 PRINT AT L,5;CHR$ 136;AT L,6;CHR$ 136;AT L,24;CHR$
 136
340 PRINT AT L,25;CHR$ 136;AT L,26;CHR$ 136;AT L,27;CH
R$ 136;AT L,28;CHR$ 136
350 NEXT L
360 PRINT AT 7,7;CHR$ 136;AT 7,23;CHR$ 136
```

```
370 FOR L=7 TO 17
380 PRINT AT L,8;CHR$ 136;AT L,22;CHR$ 136;AT L,13;CHR
$ 136
390 PRINT AT L,9;CHR$ 136;AT L,10;CHR$ 136;AT L,11;CHR
$ 136;AT L,12;CHR$ 136
400 NEXT L
410 FOR L=14 TO 21
420 PRINT AT 15,L;CHR$ 136;AT 16,L;CHR$ 136;AT 17,L;CH
R$ 136
430 NEXT L
440 FOR L=11 TO 15
450 PRINT AT L,14;CHR$ 136;AT L,20;CHR$ 136
460 NEXT L
470 FOR L=15 TO 19
480 PRINT AT 14,L;CHR$ 136
490 NEXT L
500 PRINT AT 13,15;CHR$ 136;AT 13,19;CHR$ 136;AT 12,15
;CHR$ 136;AT 12,19;CHR$ 136
510 PRINT AT 13,16;CHR$ 136;AT 13,18;CHR$ 136
520 FOR L=7 TO 14
530 PRINT AT L,21;CHR$ 136
540 NEXT L
550 FOR L=7 TO 8
560 PRINT AT L,14;CHR$ 136;AT L,20;CHR$ 136
570 NEXT L
580 FOR L=15 TO 19
590 PRINT AT 7,L;CHR$ 136
600 NEXT L
610 PRINT AT 8,17;CHR$ 136;AT 7,17;CHR$ 136
620 FOR L=8 TO 22
630 PRINT AT 18,L;CHR$ 3;AT 20,L;CHR$ 3
640 NEXT L
650 PRINT AT 19,14;CHR$ 128;AT 19,16;CHR$ 128
660 FOR L=18 TO 20
670 PRINT AT L,8;CHR$ 133;AT L,22;CHR$ 5
680 NEXT L
690 PRINT AT 18,14;CHR$ 128;AT 18,16;CHR$ 128
700 SLOW
710 PRINT AT 19,15;N$(1);AT 10,14;F$
720 PRINT AT 21,4;"MY HEART THROBS FOR YOU"
730 PRINT AT 10,14;"       ";AT 10,14;F$
740 GOTO 730
```

TRS-80 Color Computer/*Personal Valentine*

```
10 CLS
20 PRINT "COMPUTER VALENTINE"
30 PRINT
40 PRINT "PRESS <ENTER> AFTER EACH REPLY."
50 PRINT
60 PRINT "WHAT IS YOUR NAME?"
70 PRINT "(EIGHT LETTERS OR FEWER, PLEASE)"
80 INPUT N$
90 IF LEN(N$)>8 THEN 70
100 PRINT
110 PRINT "WHO IS THE VALENTINE FOR?"
120 INPUT F$
130 CLS
```

```
140 READ CH,CD,B
150 IF CH=-1 THEN 230
160 FOR Z=1 TO B
170 READ X,Y
180 FOR LO=X TO Y
190 PRINT @LO,CHR$(CH+CD)
200 NEXT LO
210 NEXT Z
220 GOTO 140
230 PRINT @384,F$
240 PRINT @428,"MY HEART"
250 PRINT @457,"THROBS FOR YOU"
260 PRINT @504,N$;
270 FOR X=1 TO 7
280 READ A(X),B(X),C(X)
290 NEXT X
300 HO=CO
310 CO=RND(8)
320 IF CO=3 OR CO=HO THEN 310
330 FOR X=1 TO 7
340 FOR Y=A(X) TO B(X)
350 SET(Y,C(X),CO)
360 NEXT Y
370 NEXT X
380 GOTO 300
1000 DATA 143,16,1,13,18,143,32,1,39,44,137,64,1,45,50
1010 DATA 143,32,7,51,56,69,90,100,123,131,156,163,188
1020 DATA 195,200,202,213,137,64,1,227,232,143,16,4
1030 DATA 260,263,292,295,324,327,356,359,143,32,6
1040 DATA 215,220,234,245,266,277,298,309,330,341
1050 DATA 362,373,137,64,1,247,252,143,16,4,280,283
1060 DATA 312,315,344,347,376,379,-1,-1,-1
1070 DATA 26,29,6,32,35,6,24,37,8,24,37,10,26,35,12
1080 DATA 28,33,14,30,31,16
```

TRS-80 Model III/*Personal Valentine*

```
10 DIM XX(13),YY(13),CR(6)
20 FOR I=0 TO 5
30 READ CR(I)
40 NEXT I
50 CLS
60 PRINT "COMPUTER VALENTINE"
70 PRINT
80 PRINT "PRESS <ENTER> AFTER EACH REPLY."
90 PRINT
100 PRINT "WHAT IS YOUR NAME";
110 INPUT N$
120 PRINT
130 PRINT "WHO IS THE VALENTINE FOR?"
140 PRINT "(8 LETTERS OR FEWER, PLEASE.)"
150 INPUT F$
160 IF LEN(F$)>8 THEN 140
170 CLS
180 READ A,B,X,Y,CH
190 IF A=-1 THEN 260
200 FOR CO=A TO B
210 FOR RO=X TO Y
```

```
220 PRINT @ CO+RO*64,CHR$(CH);
230 NEXT RO
240 NEXT CO
250 GOTO 180
260 CH=140
270 READ A,B
280 IF A=-1 THEN 360
290 FOR CO=A TO B
300 READ X,Y
310 FOR RO=X TO Y
320 PRINT @ CO+RO*64,CHR$(CH);
330 NEXT RO
340 NEXT CO
350 GOTO 270
360 FOR I=0 TO 12
370 READ XX(I),YY(I)
380 NEXT I
390 Q=8-LEN(F$)
400 PRINT @ 351+Q/2,F$;
410 PRINT @ 917,"MY HEART THROBS FOR YOU.";
420 QQ=(LEN(N$)+6)/2
430 PRINT@993-QQ,"LOVE, ";N$;
440 HO=BA
450 BA=CR(INT(RND(0)*6))
460 IF BA=HO THEN 450
470 FOR I=0 TO 12
480 FOR RO=XX(I) TO YY(I)
490 PRINT @ I+28+RO*64,CHR$(BA);
500 NEXT RO
510 NEXT I
520 GOTO 400
1000 DATA 126,60,62,35,43,58
1010 DATA 0,22,0,12,191,41,63,0,12,191,23,40,0,0,191
1020 DATA 26,37,0,0,128,9,14,7,12,128,49,54,7,12,128
1030 DATA 26,37,1,1,153,8,15,6,6,153,48,55,6,6,153,0
1040 DATA 63,13,13,131,-1,-1,-1,-1,-1,8,55,3,5,3,5,3
1050 DATA 5,2,5,2,5,2,5,2,5,2,5,1,4,1,12,1,12,1,12
1060 DATA 1,12,1,12,1,12,1,12,1,12,1,12,2,12,2,12
1070 DATA 6,12,6,12,7,12,7,12,8,12,8,12,9,12,8,12
1080 DATA 8,12,7,12,7,12,6,12,6,12,1,12,1,12,1,12
1090 DATA 1,12,1,12,1,12,1,4,2,5,2,5,2,5,2,5,2,5
1100 DATA 3,5,3,5,3,5,28,41,2,3,2,2,2,2,2,2,2,2,2
1110 DATA 3,2,4,2,3,2,2,2,2,1,2,1,2,1,3,2,3,-1,-1
1120 DATA 4,5,3,5,3,6,3,6,3,7,4,7,5,8,4,7,3,7,3,6
1130 DATA 3,6,3,5,4,5
```

VIC-20/*Personal Valentine*

```
10 DIM CR(5)
20 FOR I=0 TO 5
30 READ CR(I)
40 NEXT I
50 PRINT CHR$(147)
60 PRINT "COMPUTER VALENTINE"
70 PRINT
80 PRINT "PRESS <RETURN> AFTER"
90 PRINT "EACH REPLY."
100 PRINT
```

```
110 PRINT "WHAT IS YOUR NAME?"
120 INPUT N$
130 PRINT
140 PRINT "WHO IS IT FOR?"
150 PRINT "(7 LETTERS OR FEWER,  PLEASE.)"
160 INPUT F$
170 IF LEN(F$)>7 THEN 150
180 PRINT CHR$(147)
190 SB=7680
200 CB=38400
210 POKE 36879,41
220 READ A,B,X,Y,KO
230 IF A=-1 THEN 310
240 FOR CO=A TO B
250 FOR RO=X TO Y
260 POKE CB+CO+22*RO,KO
270 POKE SB+CO+22*RO,160
280 NEXT RO
290 NEXT CO
300 GOTO 220
310 READ A,B,KO,CH
320 IF A=-1 THEN 410
330 FOR CO=A TO B
340 READ X,Y
350 FOR RO=X TO Y
360 POKE CB+CO+22*RO,KO
370 POKE SB+CO+22*RO,CH
380 NEXT RO
390 NEXT CO
400 GOTO 310
410 PRINT CHR$(19) CHR$(144)
420 FOR T=1 TO 5
430 PRINT
440 NEXT T
450 Q=7-LEN(F$)
460 PRINT TAB(8+Q/2);F$
470 FOR T=1 TO 12
480 PRINT
490 NEXT T
500 PRINT TAB(7) "MY HEART"
510 PRINT TAB(4) "THROBS FOR YOU"
520 PRINT
530 QQ=LEN(N$)/2
540 PRINT TAB(11-QQ) N$;
550 BP=36879
560 HO=BG
570 BG=CR(INT(RND(1)*6))
580 IF BG=HO THEN 570
590 IF Z/2=INT(Z/2) THEN BG=41
600 POKE BP,BG
610 Z=Z+1
620 POKE 36878,15
630 POKE 36877,128
640 FOR D=1 TO 100
650 NEXT D
660 POKE 36878,0
670 FOR D=1 TO 100
680 NEXT D
```

```
690 GOTO 560
1000 DATA 57,73,89,105,121,137,0,7,0,17,6,15,21,0,17,6
1010 DATA 8,14,0,1,6,9,12,0,1,7,2,3,11,17,7,9,12,0,1,7
1020 DATA 2,3,11,17,7,18,19,11,17,7,9,12,2,2,3,1,4,10
1030 DATA 10,3,17,20,10,10,3,0,21,18,22,1,-1,-1,-1,-1
1040 DATA -1,1,20,5,160,5,9,4,9,3,9,3,9,2,8,2,17,2,17
1050 DATA 7,17,8,17,9,17,10,17,9,17,8,17,7,17,2,17,2,8
1060 DATA 3,9,3,9,4,9,5,9,8,14,5,160,2,4,3,3,3,3,3,4,3
1070 DATA 3,2,3,2,4,-1,-1,-1,-1
```

EGG HUNT

Thanks to your computer, your child can be assured of the fun of an Easter *Egg Hunt*, regardless of the weather. All it takes is a little help from a parent. Color seven hard-boiled eggs blue, green, yellow, red, orange, white, and purple. Next, hide the eggs in the locations indicated in lines 1000–1060. (Remember to interpret the locations from the perspective of your child. For example, the yellow egg should be hidden under your child's pillow.) Place a surprise, such as a chocolate egg, in the last location indicated in line 1070 (your bedroom). Set your computer to all uppercase letters, and the program is ready for your child to play. It will start with directions to look under the kitchen sink, where a blue egg should be found. Blue is the code word, which, when typed into the computer, will reveal the next location. (For younger children, you might wish to write the color with magic marker on the appropriately colored egg, before hiding it.)

It's easy to alter the program for various occasions (birthdays, rainy-day activities, etc.) by substituting different locations and code words in lines 1000–1070. When you make these changes, be sure to include the exact line number, the word DATA, the comma between location and code word, and the exact spacing, as in the original program.

Note: For Timex, the locations and code numbers appear in lines 40–190. If you change these, copy the line exactly changing only what appears between quotes.

ADAM/*Egg Hunt*

```
9 REM --TO PLAY, MAKE SURE CAPS LOCK KEY IS DOWN--
10 HOME
20 PRINT "Welcome to the Easter"
30 PRINT "      egg hunt!"
40 PRINT
50 FOR r = 1 TO 8
60 READ place$,code$
70 IF code$ = "END" THEN 360
80 PRINT "Look ..."
90 PRINT place$
100 PRINT "for a colored"
110 PRINT "Easter egg."
120 PRINT
130 PRINT "Type the color of"
140 PRINT "the egg, then"
150 PRINT "press <RETURN>."
160 PRINT
170 PRINT "What is the color";
180 INPUT answer$
190 IF answer$ = code$ THEN 250
200 PRINT
210 PRINT "Sorry, wrong color!"
220 PRINT "Please try again."
230 GOTO 170
240 HOME
250 FOR t = 1 TO 42
260 PRINT "COLOR ACCEPTED ";
270 NEXT t
280 PRINT
290 PRINT
300 PRINT "Press <RETURN>"
```

```
310 PRINT "to continue."
320 GET r$
330 IF r$ <> CHR$(13) THEN 320
340 HOME
350 NEXT r
360 PRINT "Great! You've"
370 PRINT "done it!"
380 PRINT
390 PRINT "Look ..."
400 PRINT place$
410 PRINT "to find a surprise!"
420 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROOM,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAIL BOX,PURPLE
1070 DATA IN YOUR PARENTS' ROOM,END
```

Apple/*Egg H*

```
10 HOME
20 PRINT "WELCOME TO THE EASTER"
30 PRINT "      EGG HUNT."
40 PRINT
50 FOR R = 1 TO 8
60 READ PLACE$,CODE$
70 IF CODE$ = "END" THEN 330
80 PRINT "LOOK ";PLACE$
90 PRINT "FOR A COLORED"
100 PRINT "EASTER EGG."
110 PRINT
120 PRINT "TYPE THE COLOR OF"
130 PRINT "THE EGG, THEN"
140 PRINT "PRESS <RETURN>."
150 PRINT
160 PRINT "WHAT IS THE COLOR";
170 INPUT ANSWER$
180 IF ANSWER$ = CODE$ THEN 230
190 PRINT
200 PRINT "SORRY, WRONG COLOR!"
210 PRINT "PLEASE TRY AGAIN."
220 GOTO 160
230 HOME
240 FOR T = 1 TO 60
250 PRINT "COLOR ACCEPTED ";
260 NEXT T
270 PRINT:PRINT
280 PRINT "PRESS <RETURN> TO CONTINUE."
290 GET R$
300 IF R$ <> CHR$(13) THEN 290
310 HOME
320 NEXT R
330 PRINT "GREAT!! YOU'VE"
340 PRINT "DONE IT!!"
350 PRINT
```

```
360 PRINT "LOOK..."
370 PRINT PLACE$
380 PRINT "TO FIND A SURPRISE."
390 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROOM,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAILBOX, PURPLE
1070 DATA IN YOUR PARENTS' ROOM,END
```

Atari/*Egg Hunt*

```
10 DIM PLACE$(30),CODE$(10),ANSWER$(10)
20 OPEN #1,4,0,"K:"
30 PRINT CHR$(125)
40 PRINT "WELCOME TO THE EASTER"
50 PRINT "       EGG HUNT!"
60 PRINT
70 FOR R=1 TO 8
80 READ PLACE$,CODE$
90 IF CODE$="END" THEN 340
100 PRINT "LOOK ";PLACE$
110 PRINT "FOR A COLORED"
120 PRINT "EASTER EGG."
130 PRINT
140 PRINT "TYPE THE COLOR OF"
150 PRINT "THE EGG, THEN"
160 PRINT "PRESS <RETURN>."
170 PRINT
180 PRINT "WHAT IS THE COLOR";
190 INPUT ANSWER$
200 IF ANSWER$=CODE$ THEN 250
210 PRINT
220 PRINT "SORRY, WRONG COLOR!"
230 PRINT "PLEASE TRY AGAIN."
240 GOTO 180
250 PRINT CHR$(125)
260 FOR T=1 TO 55
270 PRINT "COLOR ACCEPTED ";
280 NEXT T
290 PRINT
300 PRINT "PRESS ANY KEY TO CONTINUE.";
310 GET #1,A
320 PRINT CHR$(125)
330 NEXT R
340 PRINT "GREAT!! YOU'VE"
350 PRINT "DONE IT!!"
360 PRINT
370 PRINT "LOOK ..."
380 PRINT PLACE$
390 PRINT "TO FIND A SURPRISE!"
400 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
```

```
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROOM,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAILBOX,PURPLE
1070 DATA IN YOUR PARENT'S ROOM,END
```

Commodore 64/*Egg Hunt*

```
10 PRINT CHR$(147)
20 PRINT "WELCOME TO THE EASTER"
30 PRINT "       EGG HUNT!"
40 PRINT
50 FOR R = 1 TO 8
60 READ PLACE$,CODE$
70 IF CODE$ ="END" THEN 360
80 PRINT "LOOK ..."
90 PRINT PLACE$
100 PRINT "FOR A COLORED"
110 PRINT "EASTER EGG."
120 PRINT
130 PRINT "TYPE THE COLOR OF"
140 PRINT "THE EGG, THEN"
150 PRINT "PRESS <RETURN>."
160 PRINT
170 PRINT "WHAT IS THE COLOR";
180 INPUT ANSWER$
190 IF ANSWER$=CODE$ THEN 240
200 PRINT
210 PRINT "SORRY, WRONG COLOR!"
220 PRINT "PLEASE TRY AGAIN."
230 GOTO 170
240 PRINT CHR$(147)
250 FOR T= 1 TO 60
260 PRINT "COLOR ACCEPTED ";
270 NEXT T
280 PRINT
290 PRINT
300 PRINT "PRESS <RETURN>"
310 PRINT "TO CONTINUE."
320 GET R$
330 IF R$ <> CHR$(13) THEN 320
340 PRINT CHR$(147)
350 NEXT R
360 PRINT "GREAT! YOU'VE"
370 PRINT "DONE IT!"
380 PRINT
390 PRINT "LOOK ..."
400 PRINT PLACE$
410 PRINT "TO FIND A SURPRISE!"
420 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROOM,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAILBOX,PURPLE
1070 DATA IN YOUR PARENTS' ROOM,END
```

IBM PCs/Egg Hunt

```
10 KEY OFF
20 WIDTH 40
30 CLS
40 PRINT "WELCOME TO THE EASTER"
50 PRINT "       EGG HUNT!"
60 PRINT
70 FOR R=1 TO 8
80 READ PLACE$,CODE$
90 IF CODE$="END" THEN 380
100 PRINT "LOOK ..."
110 PRINT PLACE$
120 PRINT "FOR A COLORED"
130 PRINT "EASTER EGG."
140 PRINT
150 PRINT "TYPE THE COLOR OF"
160 PRINT "THE EGG, THEN"
170 PRINT "PRESS <ENTER>."
180 PRINT
190 PRINT "WHAT IS THE COLOR";
200 INPUT ANSWER$
210 IF ANSWER$=CODE$ THEN 270
220 PRINT
230 PRINT "SORRY, WRONG COLOR!"
240 PRINT "PLEASE TRY AGAIN."
250 GOTO 190
260 CLS
270 FOR T=1 TO 60
280 PRINT "COLOR ACCEPTED ";
290 NEXT T
300 PRINT
310 PRINT
320 PRINT "PRESS <ENTER>"
330 PRINT "TO CONTINUE."
340 R$=INKEY$
350 IF R$<>CHR$(13) THEN 340
360 CLS
370 NEXT R
380 PRINT "GREAT! YOU'VE"
390 PRINT "DONE IT!"
400 PRINT
410 PRINT "LOOK ..."
420 PRINT PLACE$
430 PRINT "TO FIND A SURPRISE!"
440 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROON,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAILBOX,PURPLE
1070 DATA IN YOUR PARENTS' ROOM,END
```

TI-99/4A/*Egg Hunt*

```
10 CALL CLEAR
20 PRINT "WELCOME TO THE EASTER"
30 PRINT "       EGG HUNT!"
```

```
40 PRINT
50 FOR R=1 TO 8
60 READ PLACE$,CODE$
70 IF CODE$="END" THEN 360
80 PRINT "LOOK ..."
90 PRINT PLACE$
100 PRINT "FOR A COLORED"
110 PRINT "EASTER EGG."
120 PRINT
130 PRINT "TYPE THE COLOR OF"
140 PRINT "THE EGG, THEN"
150 PRINT "PRESS <ENTER>."
160 PRINT
170 PRINT "WHAT IS THE COLOR";
180 INPUT ANSWER$
190 IF ANSWER$=CODE$ THEN 240
200 PRINT
210 PRINT "SORRY, WRONG COLOR!"
220 PRINT "PLEASE TRY AGAIN."
230 GOTO 170
240 CALL CLEAR
250 FOR T=1 TO 28
260 PRINT "COLOR OK ";
270 NEXT T
280 PRINT
290 PRINT
300 PRINT "PRESS <ENTER>"
310 PRINT "TO CONTINUE."
320 CALL KEY(0,KEY,STATUS)
330 IF KEY<>13 THEN 320
340 CALL CLEAR
350 NEXT R
360 PRINT "GREAT! YOU'VE"
370 PRINT "DONE IT!"
380 PRINT
390 PRINT "LOOK ..."
400 PRINT PLACE$
410 PRINT "TO FIND A SURPRISE!"
420 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROOM,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAILBOX,PURPLE
1070 DATA IN YOUR PARENTS' ROOM,END
```

Timex Sinclair 1000 & 1500/*Egg Hunt*

```
10 DIM P$(8,30)
20 DIM C$(8,10)
30 SLOW
40 LET P$(1)="UNDER THE KITCHEN SINK"
50 LET C$(1)="BLUE"
60 LET P$(2)="IN THE REFRIGERATOR"
70 LET C$(2)="GREEN"
80 LET P$(3)="UNDER YOUR PILLOW"
```

```
90 LET C$(3)="YELLOW"
100 LET P$(4)="IN YOUR SOCKS DRAWER"
110 LET C$(4)="RED"
120 LET P$(5)="IN THE BATHROOM"
130 LET C$(5)="ORANGE"
140 LET P$(6)="IN YOUR CLOSET"
150 LET C$(6)="WHITE"
160 LET P$(7)="IN THE MAILBOX"
170 LET C$(7)="PURPLE"
180 LET P$(8)="IN YOUR PARENTS ROOM"
190 LET C$(8)="END"
200 CLS
210 PRINT "WELCOME TO THE EASTER"
220 PRINT "      EGG HUNT."
230 PRINT
240 FOR R=1 TO 8
250 IF C$(R, TO 3)="END" THEN GOTO 540
260 PRINT "LOOK ..."
270 PRINT P$(R)
280 PRINT "FOR A COLORED"
290 PRINT "EASTER EGG.
300 PRINT
310 PRINT "TYPE THE COLOR OF"
320 PRINT "THE EGG, THEN"
330 PRINT "PRESS <ENTER>."
340 PRINT
350 PRINT "WHAT IS THE COLOR?";
360 INPUT A$
370 IF A$=C$(R, TO LEN A$) THEN GOTO 420
380 CLS
390 PRINT "SORRY, WRONG COLOR."
400 PRINT "PLEASE TRY AGAIN."
410 GOTO 350
420 CLS
430 FOR T=1 TO 15
440 PRINT "COLOR ACCEPTED ";
450 NEXT T
460 PRINT
470 PRINT
480 PRINT "PRESS <ENTER>"
490 PRINT "TO CONTINUE."
500 LET R$=INKEY$
510 IF R$<>CHR$ 118 THEN GOTO 500
520 CLS
530 NEXT R
540 PRINT "GREAT. YOU HAVE"
550 PRINT "DONE IT."
560 PRINT
570 PRINT "LOOK ..."
580 PRINT P$(R)
590 PRINT "TO FIND A SURPRISE."
600 STOP
```

TRS-80 Color Computer/*Egg Hunt*

```
10 CLS
20 PRINT "WELCOME TO THE EASTER"
30 PRINT "       EGG HUNT!"
```

```
40 PRINT
50 FOR R = 1 TO 8
60 READ PLACE$,CODE$
70 IF CODE$ = "END" THEN 360
80 PRINT "LOOK..."
90 PRINT PLACE$
100 PRINT "FOR A COLORED"
110 PRINT "EASTER EGG."
120 PRINT
130 PRINT "TYPE THE COLOR OF"
140 PRINT "THE EGG, THEN"
150 PRINT "PRESS <ENTER>."
160 PRINT
170 PRINT "WHAT IS THE COLOR";
180 INPUT ANSWER$
190 IF ANSWER$ = CODE$ THEN 240
200 PRINT
210 PRINT "SORRY, WRONG COLOR!"
220 PRINT "PLEASE TRY AGAIN."
230 GOTO 170
240 CLS
250 FOR T = 1 TO 32
260 PRINT "COLOR ACCEPTED ";
270 NEXT T
280 PRINT
290 PRINT
300 PRINT "PRESS <ENTER>"
310 PRINT "TO CONTINUE."
320 R$ = INKEY$
330 IF R$ <> CHR$(13) THEN 320
340 CLS
350 NEXT R
360 PRINT "GREAT! YOU'VE"
370 PRINT "DONE IT!"
380 PRINT
390 PRINT "LOOK..."
400 PRINT PLACE$
410 PRINT "TO FIND A SURPRISE!"
420 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROOM,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAILBOX,PURPLE
1070 DATA IN YOUR PARENT'S ROOM,END
```

TRS-80 Model III/*Egg Hunt*

```
10 CLS
20 PRINT "WELCOME TO THE EASTER"
30 PRINT "       EGG HUNT!"
40 PRINT
50 FOR R=1 TO 8
60 READ PLACE$,CODE$
70 IF CODE$="END" THEN 360
80 PRINT "LOOK ..."
```

```
90 PRINT PLACE$
100 PRINT "FOR A COLORED"
110 PRINT "EASTER EGG."
120 PRINT
130 PRINT "TYPE THE COLOR OF"
140 PRINT "THE EGG, THEN"
150 PRINT "PRESS <ENTER>."
160 PRINT
170 PRINT "WHAT IS THE COLOR";
180 INPUT ANSWER$
190 IF ANSWER$=CODE$ THEN 240
200 PRINT
210 PRINT "SORRY, WRONG COLOR!"
220 PRINT "PLEASE TRY AGAIN."
230 GOTO 170
240 CLS
250 FOR T=1 TO 59
260 PRINT "COLOR ACCEPTED ";
270 NEXT T
280 PRINT
290 PRINT
300 PRINT "PRESS <ENTER>"
310 PRINT "TO CONTINUE."
320 R$=INKEY$
330 IF R$<>CHR$(13) THEN 320
340 CLS
350 NEXT R
360 PRINT "GREAT! YOU'VE"
370 PRINT "DONE IT!"
380 PRINT
390 PRINT "LOOK ..."
400 PRINT PLACE$
410 PRINT "TO FIND A SURPRISE!"
420 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROOM,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAILBOX,PURPLE
1070 DATA IN YOUR PARENTS' ROOM,END
```

VIC-20/*Egg Hunt*

```
10 PRINT CHR$(147)
20 PRINT "WELCOME TO THE EASTER"
30 PRINT "       EGG HUNT!"
40 PRINT
50 FOR R = 1 TO 8
60 READ PLACE$,CODE$
70 IF CODE$ ="END" THEN 360
80 PRINT "LOOK ..."
90 PRINT PLACE$
100 PRINT "FOR A COLORED"
110 PRINT "EASTER EGG."
120 PRINT
130 PRINT "TYPE THE COLOR OF"
140 PRINT "THE EGG, THEN"
150 PRINT "PRESS <RETURN>."
160 PRINT
170 PRINT "WHAT IS THE COLOR"
180 INPUT ANSWER$
190 IF ANSWER$=CODE$ THEN 240
200 PRINT
210 PRINT "SORRY, WRONG COLOR!"
220 PRINT "PLEASE TRY AGAIN."
230 GOTO 170
240 PRINT CHR$(147)
250 FOR T= 1 TO 22
260 PRINT "COLOR ACCEPTED ";
270 NEXT T
280 PRINT
290 PRINT
300 PRINT "PRESS <RETURN>"
310 PRINT "TO CONTINUE."
320 GET R$
330 IF R$ <> CHR$(13) THEN 320
340 PRINT CHR$(147)
350 NEXT R
360 PRINT "GREAT! YOU'VE"
370 PRINT "DONE IT!"
380 PRINT
390 PRINT "LOOK ..."
400 PRINT PLACE$
410 PRINT "TO FIND A SURPRISE!"
420 END
1000 DATA UNDER THE KITCHEN SINK,BLUE
1010 DATA IN THE REFRIGERATOR,GREEN
1020 DATA UNDER YOUR PILLOW,YELLOW
1030 DATA IN YOUR SOCKS DRAWER,RED
1040 DATA IN THE BATHROOM,ORANGE
1050 DATA IN YOUR CLOSET,WHITE
1060 DATA IN THE MAILBOX,PURPLE
1070 DATA IN YOUR PARENTS' ROOM,END
```

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